



RAILTEL CORPORATION OF INDIA LTD.
(A Govt. of India Enterprise)

Territory Office

Plot No. 17, 1st Floor, Raghunath Nagar,
Near Shahpura Police station,
Bhopal MP - 462039

Western Region Office

Western Railway Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai – 400013

Corporate Office

Plate-A, 6th Floor, Office Tower-2,
NBCC Building, East Kidwai Nagar,
New Delhi - 110023

Tender

For

“Selection of System Integrator for Project for CCTV
Installation with IP Based DOME Camera within built Mic-
Specification & IP Based Bullet Camera i/c required
accessories at the Godowns of Markfed of
Bhopal/Narmadapuram Division and Ujjain Division.”

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NOTICE

Tender Ref:- RCIL WR-BPL/MKTG(EB)/Sept.-6/11

Dtd.25-09-2023

RailTel Corporation of India Ltd invites Tender's via E-Mail with password protected folder from reputed firms for work mentioned in the Scope of this Tender. The technical and commercial (price) bids shall be submitted through E-Mail at bpltooffice@railtelindia.com in password protected folder as separate PDF documents up to the end date & time mentioned below.

Sr. No .	Description	Estimated Cost	Last date & Time for Bid Submission	Date & Time for Bid Open	Completion Period
1	“Selection of System Integrator for CCTV Installation with IP Based DOME Camera within built Mic-Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division”	As per tender document attached As per Tender No: CE/CCTV/810/23 Bhopal Dated - 14.09.2023	27-09-2023 12:00 Hrs.	27-09-2023 12:30 Hrs.	As per Tender No: CE/CCTV/810 /23 Bhopal Dated - 14.09.2023

Note: In case of any discrepancy or ambiguity in any clause/specification pertaining to scope of work area, Tender no. CE/CCTV/810/23 Bhopal Dated - 14.09.2023. “Selection of System Integrator for Project CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division” will be sacrosanct **(Copy at annexure–VIII).**

PRICE BID

Please Refer BoQ – Annexure -VIII

Bidder should quote price for end-to-end SOW wrt–Tender Ref: RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023 and subsequent corrigenda. “Selection of System Integrator for CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division”.

Note: In case of any discrepancy or ambiguity in any clause/specification pertaining to scope of work area, the Tender no. CE/CCTV/810/23 Bhopal Dated - 14.09.2023. “Selection of System Integrator for CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division”. will be sacrosanct
(Copy at annexure–VIII).

1. The details are as under:

1	Issue date of “Invitation for Tender document”	25-09-2023
2	Last date for submission of Tender by applicants	27-09-2023 12:00 Hrs.
3	Opening of Tenders	27-09-2023 12:30 Hrs.
4	Tenders Submission Mode	By email (with password protected)
5	Completion Period	As per tender ref. no. CE/CCTV/810/23 Bhopal Dated - 14.09.2023

Tender and all corrigenda will be made available at RailTel Corporation of India’s portal <https://www.railtelindia.com>. Tender fee- Rs. 15,000/- +GST) & EMD of Rs. 4,56,290/- as per tender clause. **(For Bank detail Refer Annexure IX). Rs. 20,00,000.00 (Advance Security Deposit) (At time of Agreement)**

Note: For bid submission, tenderer will have to submit signed and stamped printed copy of the tender document.

1. RailTel intends to look for an empanelled BIDDER who can help us with Bid Submission & have the ability to take up the work on turnkey basis and who has good connect with the customer and local environment. The bidder shall bear all costs associated with the preparation, submission / participation in the bid. RailTel in no way will be responsible or liable for these costs regardless of the conduct or outcome of the bidding process.
2. Bidders shall necessarily furnish the details of the valid SD/PBG/Tender fee/fee applicable submitted at time of empanelment for consideration of their offer.
3. Undertaking stating that bidder accept to execute SOW of Tender on fully Back-to-Back basis.
4. Copy of power of attorney issued in favor of signatory
5. The bidder responding to this Tender shall give an undertaking that, if they are successful, then they will not participate directly or with other direct bidder
6. A pre bid agreement will be signed with successful bidder on non-judicial stamp of adequate value as per final bid value. Format will be shared with successful bidder only
7. The Bidder should have average annual turnover from IT / ITES/ICT of ₹ 04 crores in the last 3 Years out of previous 4 years (i.e., for FY 2020-21, FY 2021-22, FY 2022-23)
8. The Bidder must provide acceptance (with documents) on the following:

All payments shall be paid on Bidder back-to-back basis. RailTel shall make payment to selected Business Associate after receiving payment from the end customer for the successful completion portion. In case of any penalty or deduction made by the end customer, the same shall be deducted from the selected BIDDER.

The BIDDER should have the pre-requisite experience for similar type of work.

Bidder will submit No deviation certificate. Bidder will submit non-blacklisted certificate.

Partner will be chosen as per the policy guidelines of RailTel Corporation of India Ltd. Further evaluation will be carried out.

Please submit your proposal latest by 27-09-2023 upto 12:00 Hrs.

“All Bidders are required to submit their bids (complete in all aspects) within the time and date as specified in Section 2 (Fact Sheet). The Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained”.

Prospective bidders are required to direct all communications related to this Invitation for Tender document, through the following Help Desk:

Contact (1)	Ms. Aanchal I Raaj
Designation	AGM/Bhopal
Email	aanchal@railtelindia.com
Telephone	+917552428644
Mobile	+919717644122
Contact (2)	Shri. Anand Kumar
Designation	Deputy General Manager/Marketing
Email	anandnkn@railtelindia.com
Telephone	+917552428644
Mobile	+919004444107
Contact (3)	Shri. Pavan Kumar Bhargava
Designation	Group General Manager/Territory
Email	pavan@railtelindia.com
Telephone	+917552428644
Mobile	+919179005188

	Check List	
Sl. No	Document	Remarks (Yes/ No)
1	Offer Letter	Annexure I
1	Proof of Submission of PBG/SD/Tender Empanelment Fee submitted against Empanelment with RailTel	
2	Copy of LoA/LOI issued by RailTel for confirmation of empanelment.	
3	Undertaking stating that bidder accept to execute SOW of Tender on fully Back-to-Back basis.	
4	The bidder responding to this Tender shall give an undertaking that, if they are successful, then they will not participate directly or with other direct bidder	
5	Compliance certificate format	Annexure II
6	Financial capacity Format	Annexure III
7	Format for Declaration for acceptance of all Terms & Conditions	Annexure IV
8	Non blacklisted	Annexure V
9	No deviation certificate	Annexure VI
10	RailTel's bank account detail to deposit EMD	Annexure VII
11	Tender Document – CE/CCTV/810/23 Bhopal Dated - 14.09.2023	Annexure VIII
12	Price Bid (BOQ) Annexure Financial Bid Formed of Tender No. CE/CCTV/810/23 Bhopal Dated - 14.09.2023	Annexure IX (BOQ)

ANNEXURE-I:

OFFERLETTER

(To be on company letter head)

Tender Ref.- RCIL WR-BPL/MKTG(EB)/Sept.-6/11

Dtd.25-09-2023

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013

Dear Sir,

Sub: Participation in the Tender.

Having examined the Invitation Tender document bearing the reference number Tender Ref. RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023 released by your esteemed organization, we undersigned, hereby acknowledge the receipt of the same and offer to participate in conformity with the said Invitation for Tender document.

I/We fully understand the terms and conditions as contained in the EOI document and we agree that the same shall apply to our tender and I/We shall be bound by them.

Bid Security Declaration & Tender document cost details are as follows :-

Tender document cost: -

Bid Security Declaration:-

We hereby declare that all the information and supporting documents furnished as a part of our response to the said Invitation for Tender document, are true to the best of our knowledge. We understand that in case any discrepancy is found in the information submitted by us, our Tender is liable to be rejected.

Date:

Signature with seal-

Name: _____

Designation: _____

Annexure II

Compliance Certificate

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013

Tender Ref:- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023

Dear Sir,

This is in response to the Invitation for Tender for the “Selection of System Integrator for Implementation of AI-based Smart Enforcement System to curb illegal transportation of mineral” in Tender Ref:- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023 We have applied against Tender issued by RailTel Corporation of India Ltd. We hereby covenant, warrant and confirm. We hereby comply with all the terms and conditions/stipulations as contained in the Invitation for Tender document.

Date:

Signature with seal (in the box)



Name:

Designation:

Annexure- III**Financial capacity Format****(to be issued by practicing Chartered Accountant on its letter head)****TO WHOM IT MAY CONCERN**

Tender Ref.- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023

This is to certify that M/s..... having its office at
..... are in the business of
..... for Completed years (considered
upto 31st March 2023) and the date of incorporation is _____. Their annual financial
Turnover during the preceding three years or from date of incorporation (in case of date of
incorporation is within three years of March) are as given below:

Financial Year	Turnover (in Rs Cr)	Profit / Loss (in Rs Cr)
2020-2021		
2021-2022		
2022-2023		

This is further certified that the above Turnover is in line with the Turnover declared by the Firm in their
Income Tax Returns filed under PAN.....

Place.....

Signature.....

Name.....

Annexure-IV

Performa for Declaration of acceptance for all Terms & Conditions

Declaration for acceptance of all Terms & Conditions of the
Tender Ref.- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023

1. We M/s (_____) having registered office at (Address) _____ agree to all the Terms & Conditions of the Tender Ref: RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023 issued by RailTel.
2. Our offer will remain valid for 210 days from the date of opening of the Tender.
3. We confirm that we have the necessary resources & capabilities to undertake the work as specified in the schedule of work as per all terms and conditions given in the above Tender. We have also understood the process of submitting bid to RAILTEL and Instructions given in the above Tender. Further, we confirm that we shall execute the work against this price discovery for scope as specified in this Tender.
4. We also agree that RailTel has the right to reject all Tender, in part or in full without assigning any reason whatsoever.
5. This Tender along with other documents as stipulated in Tender together with your written acceptance thereof shall constitute a binding contract between us.

Date:-

Name of the Company:-

Signature & Seal:-

Annexure-V

No n - Blacklisting Certificate Declaration

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai-400013

Sub: Undertaking of no deviation from Tender/ RFP terms and condition
Tender Ref.- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023

We hereby undertake and submit the declaration that our firm/company is not debarred/black listed for future business with any Central/State Government organization/CPSU/SPSU in India.

In case, at any stage if the above declaration is found false or incorrect, the Purchaser shall be free to take any punitive/legal action against us, as may be deemed fit, which shall be acceptable / binding on us and the consequences shall be to our account.

Date:

Name & Signature of
Authorized Representative:

Company Seal:

Name of Bidder:

Full Address:

Telephone No.:

Annexure-VI

Format for Statement of No Deviation from the RFP

To,
Principal Executive Director
RailTel Corporation of India Limited
Western Railway
Microwave Complex
Senapati Bapat Marg,
Near Railway Sports Ground,
Mahalaxmi, Mumbai – 400013

Date:_____

Sub: Undertaking of no deviation from Tender/RFP terms and condition
Tender Ref.- RCIL WR-BPL/MKTG(EB)/Sept.-6/11 Dtd.25-09-2023

Dear Sir,

This is to confirm that the proposal/bid submitted by <<_____>>, is in complete agreement with the RFP/Tender and any of the corrigendum(s) or amendment(s) issued thereon and there is no deviation whatsoever.

Date:

Name & Signature of
Authorized Representative:

Company Seal:

Name of Bidder:

Full Address:

Telephone No.:

Annexure -VII



**Mahalaxmi Branch
Mahalaxmi Chambers
22, Bhulabhai Desai Road
MUMBAI: 400 026**

Tel. No. No.23512895 / 23517234 Fax No.23516948

LT No:MAH/RCIL/2010

Date: 21/10/2010

To,
The Sr. Manager (Finance)
Railtel Corporation Of India Limited
Mahalaxmi,Mumbai

Dear Sir,

Sub:- Bank Details For your collection account.

We are in receipt of your letter no. RCIL/WR/Fin/Bank Matters dated 20.10.2010
Requesting bank details for your collection account no. 317801010036605. Details are below:-

Account No.- 317801010036605

A/c Name- Railtel WR collection A/c

Bank Name- UNION BANK OF INDIA

Branch name- Mahalaxmi, branch

**Branch address- 22, bhulabhai desai Road, Mahalaxmi chambers,
Mahalaxmi, Mumbai-400026**

IFSC Code- UBIN0531782

Swift Code- UBININBBLOP

Thanking You

Your's faithfully

P.Tiwari
Pushpa Tiwari
Manager



Annexure -VIII

CE/CCTV/810/23 Bhopal Dated - 14.09.2023



कार्यालय म०प्र० राज्य सहकारी विपणन संघ मर्यादित मुख्यालय भोपाल

क्र०/यॉ०/ 810/2023

भोपाल, दिनांक : 14-09-23

प्रति,

उप महाप्रबंधक (प्रचार),
म०प्र० राज्य सहकारी विपणन संघ मर्यादित,
मुख्यालय-भोपाल.

विषय :- अल्पावधि निविदा सूचना प्रकाशन बावत् ।

कृपया संलग्न अल्पावधि निविदा सूचना को कम से कम आकार में राज्य स्तर, संभाग एवं जिला स्तर पर नियमानुसार समाचार-पत्रों में निविदा प्रकाशित करवाकर सूचित करें।

संलग्न:- अल्पावधि निविदा प्रकाशन की प्रशासकीय स्वीकृति की छायाप्रति ।

प्रबंध संचालक महोदय के आदेशानुसार.

मुख्य अभियन्ता (सि.)

प्रतिलिपि:-

1. निज सहायक प्रबंध संचालक, प्रबंध संचालक महोदय को सूचनार्थ ।
2. सचिव (समन्वयक) विपणन संघ मुख्यालय-भोपाल ।
3. मुख्य महाप्रबंधक (वित्त) विपणन संघ मुख्यालय-भोपाल ।
4. उप महाप्रबंधक (आई०टी०), म०प्र० राज्य सहकारी विपणन संघ मर्यादित मुख्यालय, भोपाल को निविदा संघ की वेबसाइट पर अपलोड करवाने बावत् सूचनार्थ ।
5. कार्यपालन यंत्री (सि०) म०प्र० राज्य सहकारी विपणन संघ मर्यादित, भोपाल ।
6. उप महाप्रबंधक (वित्त) (यॉंत्रिकी शाखा) मुख्यालय, भोपाल ।
7. मुख्यालय के नोटिस बोर्ड के लिये ।

मुख्य अभियन्ता (सि.)

म०प्र० राज्य सहकारी विपणन संघ मर्या० जहांगीराबाद भोपाल

निविदा सूचना (प्रथम अल्पावधि आमंत्रण)

विपणन संघ द्वारा **CCTV Installation with IP Based DOME Camera within built Mic-Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division** कार्य हेतु **The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India** से **E-Tender** प्रणाली के अन्तर्गत **www.mptenders.gov.in** पर केवल **Online NON SOR Item (Market Rate)** प्रतिशत दर के आधार पर निविदाएँ दिनांक **27-09-2023** को शाम 05:30 बजे तक आमंत्रित की जाती है। निविदा प्रपत्र एवं कार्य के संबंध में अन्य जानकारी एवं अनिवार्य शर्तें निविदाकारों को मध्यप्रदेश शासन के ई-निविदा के पोर्टल **www.mptenders.gov.in** पर प्राप्त होगी एवं विपणन संघ की वेबसाइट **www.mpmarkfed.mp.gov.in** पर भी अवलोकनीय होगी।

क्र०	Tender Ref.No	संभाग-भोपाल/नर्मदापुरम एवं उज्जैन अंतर्गत कार्य का नाम	निविदा राशि (रु. में)
1	1732	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division. (Short term tender 1st Call)	Rs. 4,56,28,972.00

नोट:- आवश्यक होने पर उपरोक्त निविदा सूचना से संबंधित किसी भी प्रकार की सूचना अथवा संशोधन संबंधी जानकारी केवल उपरोक्तानुसार पोर्टल एवं वेबसाइट पर प्रदर्शित की जावेगी ।

मुख्य अभियन्ता (सि.)

म०प्र० राज्य सहकारी विपणन संघ मर्या० जहांगीराबाद भोपाल

सिस्टम निविदा क्र०-१७३२ की विस्तृत जानकारी (प्रथम अल्पावधि आमंत्रण)

विपणन संघ द्वारा CCTV Installation with IP Based DOME Camera within built Mic-Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division. कार्य हेतु The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India से E-Tender प्रणाली के अन्तर्गत www.mptenders.gov.in पर पर केवल Online NON SOR Item (Market Rate) प्रतिशत दर के आधार पर आमंत्रित की जाती है। निविदा प्रपत्र एवं कार्य के संबंध में अन्य जानकारी दिनांक १५-०९-२०२३ को www.mptenders.gov.in एवं संघ की वेबसाइट www.mp.markfed@mp.gov.in पर देखी जा सकती है। निविदा प्रपत्र Online Portal के माध्यम से क्रय (Document Download/Sale End Date) करने की अन्तिम तिथि २७-०९-२०२३ समय अपराह्न ५.३० बजे एवं (Bid Submission End Date) ऑनलाइन ई०एम०डी० (E-Payment) केवल पोर्टल के माध्यम से जमा करने की अन्तिम तिथि २७-०९-२०२३ समय अपराह्न ५:३० बजे तक निर्धारित है।

क्र०	Tender Ref. No.	संभाग-भोपाल/नर्मदापुरम एवं उज्जैन अंतर्गत कार्य का नाम	कार्य की अनुमानित लागत	धरोहर राशि	निविदा प्रपत्र का मूल्य	समय अवधि	ठेकेदार की श्रेणी
१.	१७३२	CCTV Installation with IP Based DOME Camera within built Mic-Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division. (Short term tender 1st Call)	Rs. 4,56,28,972.00	Rs. 456290.00	Rs. 15000.00	१५ माह	The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India.

नोट :-

- १) निविदा में की-डेट्स या अन्य जानकारी में कोई भी संशोधन होता है, वह केवल मार्कफेड के पोर्टल www.mptenders.gov.in और संघ की वेबसाइट www.mpmarkfed.mp.gov.in पर देखी जा सकती है।
- २) धरोहर राशि केवल (E-Payment द्वारा) ONLINE PORTAL के माध्यम से ही स्वीकार की जावेगी।

मुख्य अभियन्ता (सि.)

List of CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.

क्र०.	कार्य का नाम	क्षमता (मैटन)	निविदा राशि
01.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1500 MT Godown No.01 Govindpura Bhopal of Markfed.	1500	रु. 400600.00
02.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1100 MT Godown No.02 Govindpura Bhopal of Markfed.	1100	रु. 400600.00
03.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1100 MT Godown No.03 Govindpura Bhopal of Markfed.	1100	रु. 400600.00
04.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 800 MT Godown No.04 Govindpura Bhopal of Markfed.	800	रु. 233374.00
05.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 500 MT Godown No.05 Govindpura Bhopal of Markfed.	500	रु. 233374.00
06.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1000 MT Godown No.06 Govindpura Bhopal of Markfed.	1000	रु. 233374.00
07.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1000 MT Godown No.07 Govindpura Bhopal of Markfed.	1000	रु. 233374.00
08.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1500 MT Godown No.08 Govindpura Bhopal of Markfed.	1500	रु. 400600.00
09.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown Phanda Distt. Bhopal of Markfed.	1000	रु. 233374.00
10.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 5000 MT Godown No.01 Govindpura Bhopal of Markfed.	5000	रु. 409720.00
11.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 4000 MT Godown No.02 Govindpura Bhopal of Markfed.	4000	रु. 409720.00
12.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 2000 MT Godown No.03 Govindpura Bhopal of Markfed.	2000	रु. 400600.00
13.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 3000 MT Godown No.04 Govindpura Bhopal of Markfed.	3000	रु. 409720.00
14.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 5000 MT Godown No.05 Govindpura Bhopal of Markfed.	5000	रु. 409720.00
15.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Berasia Distt. Bhopal of Markfed.	1000	रु. 233374.00
16.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Berasia Distt. Bhopal of Markfed.	1000	रु. 233374.00
17.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Obedullaganj Distt. Raipur of Markfed.	1000	रु. 233374.00
18.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Badi Distt. Raipur of Markfed.	1000	रु. 233374.00
19.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 500 MT Godown No.01 at Salamatpur Distt. Raipur of Markfed.	500	रु. 233374.00
20.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Raipur Distt. Raipur of Markfed.	1000	रु. 233374.00

21	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Obedullaganj Distt. Raisen of Markfed.	1000	रु. 233374.00
22	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Badi Distt. Raisen of Markfed.	1000	रु. 233374.00
23	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Udaipura Distt. Raisen of Markfed.	1000	रु. 233374.00
24	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Gairatganj Distt. Raisen of Markfed.	1000	रु. 233374.00
25	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Goharganj Distt. Raisen of Markfed.	1000	रु. 233374.00
26	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Raisen Distt. Raisen of Markfed.	1000	रु. 233374.00
27	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Bareli Distt. Raisen of Markfed.	2000	रु. 400600.00
28	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Khargone Distt. Raisen of Markfed.	2000	रु. 400600.00
29	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Bareli Distt. Raisen of Markfed.	2000	रु. 400600.00
30	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Begumganj Distt. Raisen of Markfed.	2000	रु. 400600.00
31	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Gairatganj Distt. Raisen of Markfed.	1000	रु. 233374.00
32	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Sultanpur Distt. Raisen of Markfed.	1000	रु. 233374.00
33	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 500 MT Godown No.01 at Sehore Distt. Sehore of Markfed.	500	रु. 233374.00
34	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1100 MT Godown No.02 at Sehore Distt. Sehore of Markfed.	1100	रु. 400600.00
35	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Sehore Distt. Sehore of Markfed.	1000	रु. 233374.00
36	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Nasrullaganj Distt. Sehore of Markfed.	1000	रु. 233374.00
37	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ashta Distt. Sehore of Markfed.	1000	रु. 233374.00
38	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Sehore Distt. Sehore of Markfed.	1000	रु. 233374.00
39	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Mehatwada Distt. Sehore of Markfed.	1000	रु. 233374.00
40	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Shahganj Distt. Sehore of Markfed.	2000	रु. 400600.00
41	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Rehti Distt. Sehore of Markfed.	2000	रु. 400600.00
42	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Nasrullaganj Distt. Sehore of Markfed.	1000	रु. 233374.00
43	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Ichhawar Distt. Sehore of Markfed.	2000	रु. 400600.00

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67	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Sarangpur Distt. Rajgarh of Markfed.	1000	रु. 233374.00
68	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Narsinghar Distt. Rajgarh of Markfed.	2000	रु. 400600.00
69	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Khilchipur Distt. Rajgarh of Markfed.	2000	रु. 400600.00
70	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Jeerapur Distt. Rajgarh of Markfed.	1000	रु. 233374.00
71	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Sarangpur Distt. Rajgarh of Markfed.	1000	रु. 233374.00
72	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Pachor Distt. Rajgarh of Markfed.	1000	रु. 233374.00
73	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
74	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
75	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Banapura Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
76	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Pipariya Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
77	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Pipariya Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
78	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Pipariya Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
79	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
80	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Babai Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
81	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Hoshangabad Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
82	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Banapura Distt. Narmadapuram of Markfed.	2000	रु. 400600.00
83	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Semri Harchand Distt. Narmadapuram of Markfed.	2000	रु. 400600.00
84	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Dharamkundi Distt. Narmadapuram of Markfed.	1000	रु. 233374.00
85	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Khirkiya Distt. Harda of Markfed.	1000	रु. 233374.00
86	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Timrani Distt. Harda of Markfed.	1000	रु. 233374.00
87	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Harda Distt. Harda of Markfed.	1000	रु. 233374.00
88	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Betul Distt. Betul of Markfed.	1000	रु. 233374.00
89	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Betul Distt. Betul of Markfed.	1000	रु. 233374.00

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113	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Ratlam Distt. Ratlam of Markfed.	1000	रु. 233374.00
114	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 5000 MT Godown No.04 at Ratlam Distt. Ratlam of Markfed.	5000	रु. 409720.00
115	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Taal Distt. Ratlam of Markfed.	1000	रु. 233374.00
116	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.05 at Ratlam Distt. Ratlam of Markfed.	2000	रु. 400600.00
117	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Jora Distt. Ratlam of Markfed.	2000	रु. 400600.00
118	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 550 MT Godown No.01 at Mandsaur Distt. Mandsaur of Markfed.	550	रु. 233374.00
119	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1100 MT Godown No.02 at Mandsaur Distt. Mandsaur of Markfed.	1100	रु. 400600.00
120	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Mandsaur Distt. Mandsaur of Markfed.	1000	रु. 233374.00
121	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Mandsaur Distt. Mandsaur of Markfed.	1000	रु. 233374.00
122	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 3000 MT Godown No.01 at Shamgarh Distt. Mandsaur of Markfed.	3000	रु. 409720.00
123	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.05 at Mandsaur Distt. Mandsaur of Markfed.	1000	रु. 233374.00
124	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.06 at Mandsaur Distt. Mandsaur of Markfed.	1000	रु. 233374.00
125	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.07 at Mandsaur Distt. Mandsaur of Markfed.	1000	रु. 233374.00
126	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Neemuch Distt. Neemuch of Markfed.	1000	रु. 233374.00
127	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Javad Distt. Neemuch of Markfed.	1000	रु. 233374.00
128	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Neemuch Distt. Neemuch of Markfed.	1000	रु. 233374.00
129	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Manasa Distt. Neemuch of Markfed.	2000	रु. 400600.00
130	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.03 at Neemuch Distt. Neemuch of Markfed.	2000	रु. 400600.00
131	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Neemuch Distt. Neemuch of Markfed.	1000	रु. 233374.00
132	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Kanawati (Neemuch) Distt. Neemuch of Markfed.	2000	रु. 400600.00
133	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 600 MT Godown No.01 at Dewas Distt. Dewas of Markfed.	600	रु. 233374.00
134	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1250 MT Godown No.02 at Dewas Distt. Dewas of Markfed.	1250	रु. 400600.00

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157	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Momanbadodiya Distt. Shajapur of Markfed.	2000	रु. 400600.00
158	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Nalkheda Distt. Shajapur of Markfed.	1000	रु. 233374.00
159	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Susner Distt. Agar of Markfed.	1000	रु. 233374.00
160	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Susner Distt. Agar of Markfed.	1000	रु. 233374.00
161	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Agar Distt. Agar of Markfed.	1000	रु. 233374.00
162	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Magraniya Distt. Agar of Markfed.	2000	रु. 400600.00
163	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Paankhedi Distt. Agar of Markfed.	2000	रु. 400600.00
Total Amount			45628972.00

KEY DATES

1-	Publish Date	14-09-2023 10:30
2-	Document Download/Sale Start Date	15-09-2023 10:30
3-	Bid Submission Start Date	15-09-2023 10:30
4-	Document Download/Sale End Date	27-09-2023 17:30
5-	Bid Submission End Date	27-09-2023 17:30
6-	Bid Opening Date	29-09-2023 10:30

MANDATORY CONDITION:-

1. Cost of Bid Documents with Transaction Acknowledgement.
2. EMD (ONLY ONLINE THROUGH PORTAL) with Transaction Acknowledgement.
3. An Affidavit duly Notarized as per Annexure-T3
4. Organizational details as per Annexure T4.
5. GST Registration No.
6. The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India. Copy of registration certificate shall be submitted as a proof.
7. The bidder should have minimum average annual turnover of last three financial years of Rs. 5.00 Cr. and must submit certified copy of the audited statement of accounts, as a proof of annual turnover stated.
8. Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India / State Governments. A self-declaration certificate on the letter head should be enclosed.
9. The bidder should have experience of execution of at least one of Rs. 4.56 Crore or two of Rs.2.28 Crore of CCTV installations and maintenance work in last three financial years.
10. The bidder should have experience in Installation & Support of CCTV peripherals of state or central departments, for which bidder should produce work order or experience letter.
11. The bidder should have registered office in Bhopal (M.P.)
12. The bidder should have EPF & ESIC compliances for last two financial years and maintain at least 10 employees on their payroll. Copy of EPF & ESIC challan should be enclosed.
13. The bidder should be a profit making entity, enclosed CA Certified copy
14. The Bidder should have Toll free number to lock the complaints.
15. The bidder must have MAF of CCTV to quote in this tender
16. Pan Card.
17. EPF Registration.
18. ESIC Registration.

ADDITIONAL CONDITION :-

- 1) The amount of EPF will be separately deducted from each Running bill and Final bill @ 4% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 2) Amount of EPF which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of EPF department.
- 3) The amount of ESIC will be separately deducted from each Running bill and Final bill @ 2% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 4) Amount of ESIC which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of ESIC.

Eligibility Criteria

- a) The bidder should have been registered with MP GST. Copy of certificate shall be enclosed as a proof.
- b) The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India. Copy of registration certificate shall be submitted as a proof.
- c) The bidder should have minimum average annual turnover of last three financial years of Rs. 5.00 Crore and must submit certified copy of the audited statement of accounts, as a proof of annual turnover stated.
- d) Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India / State Governments. A self-declaration certificate on the letterhead should be enclosed.
- e) Representative authorization letter (in case signing authority is other than director) on the letterhead that is choose to sign the entire document relating to this TENDER and will be present during evaluation & negotiation during the TENDER period.
- f) The bidder should have experience in Installation & Support of CCTV peripherals of state or central departments, for which bidder should produce work order or experience letter.
- g) The bidder should have experience of execution of at least one of Rs. 4.56 Crore or two of Rs.2.28 Crore of CCTV installations and maintenance work in last three financial years.
- h) The bidder should have registered office in Bhopal (M.P.)
- i) The bidder should have EPF & ESIC compliances for last two financial years. And maintain at least 10 employees on their payroll. Copy of EPF & ESIC challan should be enclosed.
- j) The bidder should be a profit making entity, enclosed CA Certified copy
- k) The Bidder should have Toll free number to lock the complaints.
- i) The bidder must have MAF of CCTV to quote in this tender.

Technical Qualification

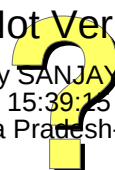
3.1 Technical Qualification.

	OEM Prequalification Criteria:	Documents Required
1	The CCTV OEM authorized should have its toll-free number with Mobile app for any technical support query from the SI or end customer which is very much required for such a big project.	Toll free nos. should be mentioned in the manufacturer's authorization letter and submitted along with the bid
2	The CCTV OEM should have its toll-free number in India for any technical support query from the SI or end customer with the mobile application-based ticketing website for logging calls and obtain service docket /ticket status. Technical Support number should be mentioned in the manufacturer's authorization letter and submitted along with the bid.	Toll free nos. should be mentioned in the manufacturer's authorization letter and submitted along with the bid.
3	The MAC address of the IP cameras must be registered in the name of OEM.	Proof to be provided by the OEM
4	The CCTV OEM must have self-owned service center for last 5 years from the date of submission of bid (not as joint venture, partnership firms or through any other association)	OEM's GST registration document clearly mentioning service tax no.to be given as proof
5	The proposed camera OEM should be a member in any of the present "ONVIF Organization Committee i.e., Steering Committee/Technical Committee or Technical Services Committee or full membership for last 4 year.	Proof to be provided by the OEM
6	The OEM for IP Cameras & VMS should have a registered entity and direct presence in India for more than 10 years as on bid submission date and should be present globally in the same line of manufacturing for at least 15 years. Camera, NVR OEM should submit a declaration letter along with letter of incorporation confirming the same.	Camera OEM should submit a declaration letter along with letter of incorporation confirming the same.
7	The OEM of major items (like CCTV Camera of all types, VMS, Servers, Storages, switches etc.) its sister concerns, or any of its group company or Subsidiary should not have been blacklisted in last 10 years by any Ministry under Government of India or by Government of any State in India or any of the Government PSUs as on tender floating date.	Certificate / affidavit mentioning that the Bidder is not blacklisted by any Ministry under Government of India or by Government of any State in India or any of the Government PSUs.

8	The CCTV OEM must have executed a similar nature of work i.e., Supply of CCTV cameras to similar customer i.e., Courts or Jails with minimum 2000 number of cameras in single order.	Documentary proof to be submitted
9	The CCTV OEM should have own Technical, Service Support Center in India with L1, L2 & L3 Support.	Documentary proof to be submitted
10	The OEM for IP Cameras & VMS should have at least 50 employees on its payroll in India. Declaration letter from the HR/country Head/Director/CEO of OEM to be submitted along with the bid.	Documentary proof to be submitted
11	All The Camera, NVR, VMS, and Intrusion system should be from same OEM	Undertaking from OEM and Bidder

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:39:13 IST
Location: Madhya Pradesh-MP

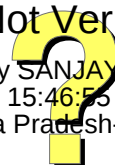


KEY DATES

1-	Publish Date	14-09-2023 10:30
2-	Document Download/Sale Start Date	15-09-2023 10:30
3-	Bid Submission Start Date	15-09-2023 10:30
4-	Document Download/Sale End Date	27-09-2023 17:30
5-	Bid Submission End Date	27-09-2023 17:30
6-	Bid Opening Date	29-09-2023 10:30

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:46:53 IST
Location: Madhya Pradesh-MP

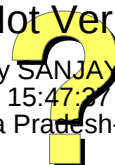


ADDITIONAL CONDITION :-

- 1) The amount of EPF will be separately deducted from each Running bill and Final bill @ 4% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 2) Amount of EPF which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of EPF department.
- 3) The amount of ESIC will be separately deducted from each Running bill and Final bill @ 2% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 4) Amount of ESIC which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of ESIC.

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:47:37 IST
Location: Madhya Pradesh-MP

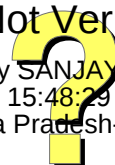


Eligibility Criteria

- a) The bidder should have been registered with MP GST. Copy of certificate shall be enclosed as a proof.
- b) The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India. Copy of registration certificate shall be submitted as a proof.
- c) The bidder should have minimum average annual turnover of last three financial years of Rs. 5.00 Crore and must submit certified copy of the audited statement of accounts, as a proof of annual turnover stated.
- d) Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India / State Governments. A self-declaration certificate on the letterhead should be enclosed.
- e) Representative authorization letter (in case signing authority is other than director) on the letterhead that is choose to sign the entire document relating to this TENDER and will be present during evaluation & negotiation during the TENDER period.
- f) The bidder should have experience in Installation & Support of CCTV peripherals of state or central departments, for which bidder should produce work order or experience letter.
- g) The bidder should have experience of execution of at least one of Rs. 4.56 Crore or two of Rs.2.28 Crore of CCTV installations and maintenance work in last three financial years.
- h) The bidder should have registered office in Bhopal (M.P.)
- i) The bidder should have EPF & ESIC compliances for last two financial years. And maintain at least 10 employees on their payroll. Copy of EPF & ESIC challan should be enclosed.
- j) The bidder should be a profit making entity, enclosed CA Certified copy
- k) The Bidder should have Toll free number to lock the complaints.
- l) The bidder must have MAF of CCTV to quote in this tender.

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:48:29 IST
Location: Madhya Pradesh-MP





Tender Ref. No. 1732

**M. P. STATE CO-OPERATIVE MARKETING FEDERATION LTD.
HEAD OFFICE-JEHANGIRABAD, BHOPAL-PIN 462008**

Ref No.CE/CCTV/810/23

Bhopal Dated - 14.09.2023

E-TENDER NOTICE

THE M. P. STATE CO-OPERATIVE MARKETING FEDERATION LTD has invited online tender for **CCTV Installation with IP Based DOME Camera within built Mic-Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.** The tender notice, tender documents, containing the terms and conditions can be downloaded through following web site <http://mptenders.gov.in> from 15.09.2023 at 10:30 hrs onwards.

Chief Engineer (C)

Cost of E-tender Form Rs.15000/-

THE M. P. STATE CO-OPERATIVE MARKETING FEDERATION LTD.

HEAD OFFICE-JEHANGIRABAD, BHOPAL-PIN 462008

Mob:- 7771855526, 9893041725, E-mail- ce.markfed@mp.gov.in

Ref No.CE/CCTV/810/23

Bhopal Dated - 14.09.2023

CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division

E-TENDER SCHEDULE

S. No.	Description	Schedule
1.	Online E-tender Document	http://www.mptenders.gov.in
2.	E-tender Document Availability For Viewing Only	http://www.mpmarkfed.mp.gov.in
3.	Price Of E-tender Document	To be downloaded from http://www.mptenders.gov.in With epayment of 15000/-
4.	E-tender Purchase Start Date	15.09.2023 at 10:30 Hrs. Onwards
5.	E-tender Purchase End Date	27.09.2023 at 17:30 Hrs. Onwards
6.	Technical Bid Opening Date	29.09.2023 at 10:30 Hrs. Onwards

- I. All eligible/interested E-tenderer are mandated to get enrolled on Etendering portal <http://www.mptenders.gov.in>
- II. To Process in E-tenders online, to encrypt their Bid and to sign the Bid, Bidders are required to obtain Digital Certificate. For Details Bidders May Contact Toll Free No. **0120-4200462,0120-4001002,0120-4001005,0120-6277787** and 18002588684 from 10:00 AM to 7:00 PM or eproc@nic.in
- III. M.P.Markfed reserves the right to reject any or all e-tenders enquiry without assigning any reasons, at any stage, without any liability.

Obtaining Digital Certificate

- 1) The Bid Data that is prepared online is required to be encrypted and the hash value of the Bid Data is required to be signed electronically using a Digital Certificate. This is required to maintain the security of the Bid Data and also be establish the identity of the contractor transacting on the system.
- 2) The Digital Certificate are issued by an approved Certifying Authority authorized by the controller of Certifying Authorities of Government of India through their Authorized Representative upon receipt of document required to obtain a Digital Certificate.
- 3) Bid Data/information for a particular E-tender may be submitted only using the Digital Certificate which is used to encrypt the data/information and sign the hash value during the Bid Preparation and has submission stage.
- 4) In case of online e-tendering, if the digital certificate issued to an authorized user of a partnership Firm is used for signing and submitting a bid, it will consider equivalent to a no objection certificate/power of attorney to that user to submit the bid on behalf of the Partnership Firm. The partnership Firm has to authorized a specific individual via an authorization certificate signed by a partner of the firm (and in case the applicant is a partner, another partner is the same firm is required to authorize) to use the digital certificate as per Indian Information Technology Act. 2000.

Chief Engineer (C)

TENDERING NOTICE (First call)

1. **CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.**
2. The bids will be received through electronic tendering mode only. The details regarding participation in the e-tendering process can be obtained on www.mptenders.gov.in. If any queries regarding participation through e-tender process interested bidder may contact on toll free no. 0120-4200462,0120-4001002, 0120-4001005,0120-6277787 and 18002588684.
3. Amendments to NIT, if any, would be published on website only, and not in newspaper.

NOTICE INVITING TENDER

CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.

S.N.	Description of Work	Amount of/ Tender Document Fees/EMD/ Bid Security (Rs.)
1.	Amount of Tender Fees.	Rs. 15,000.00 (Tender Fees)
2.	Amount of EMD should be transfer Online.	Rs. 4,56,290.00 (EMD)
3.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.	Rs. 20,00,000.00 (Advance Security Deposit) (At time of Agreement)

1. Downloading of E-tender document & its submission: -

(A) Times Schedule of downloading of E-Tender & Submission are as follows: -

S. No.	Description	Schedule
1.	Online E-tender Document	http://www.mptenders.gov.in
2.	E-tender Document Availability For Viewing Only	http://www.mpmarkfed.mp.gov.in
3.	Price Of E-tender Document	To be downloaded from http://www.mptenders.gov.in With epayment of Rs. 15000/-
4.	E-tender Purchase Start Date	15.09.2023 at 10:30 Hrs. Onwards
5.	E-tender Purchase End Date	27.09.2023 at 17:30 Hrs. Onwards
6.	Technical Bid Opening Date	29.09.2023 at 10:30 Hrs. Onwards
7.	Financial Bid Opening Date	Hrs. Onwards

- The Bid Document will be issued online from website <http://www.mptenders.gov.in> as per time schedule mentioned in key dates after making online payment of cost of bid documents as mentioned above and service charges as appearing on the portal through debit card / credit card are internet banking.
- The Bidders shall have to submit their Bids online in Electronic Format with Digital Signatures. For participation in the E-tendering process, the Bidders need to register themselves on <http://www.mptenders.gov.in> on registration, they will be provided with a user ID and a system generated password enabling them to submit their Bids online using Digital Signature Certificates (DSC).
- Bids without digital signatures will not be accepted by the Electronic Tendering System. No Financial bid will be accepted in physical form and in case, it is submitted in physical form, it shall be rejected.
- Bids will be opened online as per time schedule as above mentioned
- We are not be responsible for any delay in online submission of the Bids due to any reason whatsoever.
- All documents, EMD, Tender Fee must be submitted online only. No physical submission is required. THE MP STATE COOPERATIVE MARKETING FEDERATION LTD. may ask bidder to produce original documents for verification.
- Conditional bids shall not be considered and shall be rejected.

9. Both technical and financial bids should be submitted online.
10. The Financial Bids of only those bidders shall be opened who qualify in the technical bid.
11. TECHNICAL BID: The bidder should upload scanned copies of all documents after self attesting as mentioned in tender document to be submitted only online.
12. FINANCIAL BID: The Financial Bid is to be submitted as per given format in Tender document. The bidder is required to fill offered discount in percentage for the listed items.
13. The bid documents should not contain any corrections, erasures or over writing.
14. The bid shall remain valid for a period of 456 days from the date of closing of bids.
15. All other terms and conditions, instructions to bidder(s) regarding e-tendering process etc. may kindly be seen from the detailed Notice Inviting Tender (DNIT) available on the above noted website. The undersigned have reserved the rights to reject any or all tenders without assigning any reason.
16. At the time of opening of Technical Bids as well as Financial Bids, bidder or his/her representative may be present, if they so desire. In the event of the date of opening of the technical/financial bids being declared a holiday, the due date of opening of the technical/financial bids will be the next working day at the same hours.
17. Bidders are advised to upload their bids without waiting till the last moment to avoid the portal not being accessible due to excess traffic.
18. The CCTV Installation with IP based camera & bullet camera at the godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division shall be as per of description given in the Tender Document.
19. The Tender shall be submitted online only. The language used shall be English.
20. **ENVELOPE 'A' (Earnest Money, Tender Fee & Technical Bid Document)**
The tender shall be accompanied by the cost of the earnest money as mentioned above for the items being quoted for. All documents have to be submitted online only.

EMD

Interest free Earnest Money Deposit (EMD) of Rs. 4,56,290.00 shall pay online. The EMD of successful bidder is liable to be forfeited if the bidder revokes any terms of the tender within the validity period. EMDs given by unsuccessful bidders will be refunded after placing of work order to the successful bidder. Exemption from depositing Earnest Money Deposit (EMD) allow to MSME SSI Units of the state of Madhya Pradesh as per Store Purchase Rule 2015 (As ammended-2022) applicable.

Eligibility Criteria

- a) The bidder should have been registered with MP GST. Copy of certificate shall be enclosed as a proof.
- b) The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India. Copy of registration certificate shall be submitted as a proof.

- c) The bidder should have minimum average annual turnover of last three financial years of Rs. 5.00 Crore and must submit certified copy of the audited statement of accounts, as a proof of annual turnover stated.
- d) Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India / State Governments. A self-declaration certificate on the letterhead should be enclosed.
- e) Representative authorization letter (in case signing authority is other than director) on the letter head that is choose to sign the entire document relating to this TENDER and will be present during evaluation & negotiation during the TENDER period.
- f) The bidder should have experience in Installation & Support of CCTV peripherals of state or central departments, for which bidder should produce work order or experience letter.
- g) The bidder should have experience of execution of at least one of Rs. 4.56 Crore or two of Rs.2.28 Crore of CCTV installations and maintenance work in last three financial years.
- h) The bidder should have registered office in Bhopal (M.P.)
- i) The bidder should have EPF & ESIC compliances for last two financial years. And maintain at least 10 employees on their payroll. Copy of EPF & ESIC challan should be enclosed.
- j) The bidder should be a profit making entity, enclosed CA Certified copy
- k) The Bidder should have Toll free number to lock the complaints.
- l) The bidder must have MAF of CCTV to quote in this tender

Important Points:

- a) In absence of any one of the above, the offer may treated as non - responsive and summarily rejected.
- b) Relevant documents in support of the above criteria must be enclosed along with Technical Bid documents failing which the bid will liable to be rejected.

Note: The qualifying requirements (late shall be enclosed with the technical bid only. The bidder "110 does not qualify this criterion, will be disqualified immediately and their bids will not be considered.

22 Scope of Work

CCTV Installation with IP Based DOME Camera within built Mic- Specification of IP Based Bullet Camera i/c required accessories at the Godowns of Markfed Bhopal/Narmadapuram Division and Ujjain Division.

- | |
|---------------------------------|
| a) As defined in Financial Bid. |
|---------------------------------|

The bidder has to install the CCTV in warehouse at various location across MP. Bidder can survey the site on his own expenses for the installation. All the feasibility has to check by the bidder for the installation.

Financial Bid Format- Submitted Online only

- 23.1 The Envelop 'B' shall contain the tender documents and information related to the schedule of quantities quoting the rates per Unit etc. of the items or works pertaining to the financial bid on the financial bid document, issued by, Bhopal along with the tender document.
- 23.2 All columns shall be duly filled-in with specific information
- 23.3 The discount offered should be in percentage

24 General Terms & Conditions

The Tender Evaluation Committee will evaluate the Technical Bids and is fully authorized to reject any tender on its satisfaction that the requirements are not met for the complete needs of the **CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division**. The decision of the Tender Evaluation Committee shall be final. Only those tenders (Technical Bids) cleared by the Tender Evaluation Committee shall be eligible for their Price Bid to be opened. Those successful tenderers for whom the Envelope-B (Price Bid) is to be opened shall be duly intimated.

- 1/ Clarification of tenders: During evaluation of tenders, the <Authority> may at his discretion ask the tenderer a clarification of its tender, The request for clarification and the response shall be in writing. However, the tenderer is not permitted to alter the price (9) furnished in the Price Bid.
- 2/ Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price (i.e. obtained by multiplying the unit price and quantity), the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its tender will be rejected. If there is a discrepancy between works and figures, the amount in words will prevail.
- 3/ The amount of earnest money, in the case of successful tenderer, shall be refunded on completion of work and receipt of satisfactory test reports as per norms. However, E.M.D. of unsuccessful tenderers will be refunded after the award of the contract to the successful tenderer.
- 4/ THE MP STATE COOPERATIVE MARKETING FEDERATION LTD. does not bind himself to accept the lowest or any other tender, and reserves to itself the authority to reject any or all or the tenders received without the assignment of any reason and to negotiate with the tenderers. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect or there is any correction not duly dated, initiated by the tenderer are liable to be rejected.

However, the final decision for accepting or rejecting any or all tenders, will be in the sole discretion of
- 5/ Tender shall remain open for acceptance for a period of one hundred and eighty days from the date of closing of the tenders. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to shall without any prejudice to any other right or remedy, be at liberty to forfeit full earnest money absolutely. The decision of in this behalf shall be final and binding on the tenderer.
- 6/ The Notice Inviting tender shall form a part of the contract document. The successful tenderer shall sign the necessary contract documents consisting of the notice-inviting tender, all the documents including additional conditions, specifications, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with

any correspondence leading thereto, within the time specified in the letter communicating the acceptance of the tender. In case of delay the earnest money may be forfeited and the tender cancelled or the contract enforced as per the terms of the tender and the invitation to tender and the tenderer shall thus be bound by the conditions of contract-even though the formal agreement has not been executed and signed within the specified time by the tenderer.

7/ No additional conditions from the tenderer shall be acceptable. The tenders having any additional conditions will be summarily rejected without assigning any reason.

8/ Locations can be increase as per the THE MP STATE COOPERATIVE MARKETING FEDERATION LTD. Requirements.

25. Relationship between the Parties

Nothing mentioned herein shall be constructed as relationship of master and servant or of principal and agent as between THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal (MP), and 'the Bidder'. The bidder subject to this contract has complete charge of personnel, performing the services under this project from time to time. The bidder shall be fully (jointly and severally) responsible for the services performed by them or on their behalf hereunder.

26. Standards of Performance

The bidder shall perform the services and carry out their obligations under the contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The bidder shall always act in respect of any matter relating to this contract as faithful advisor. The bidder shall always support and safeguard the legitimate interests of THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, in any dealings with the third party. The bidder shall abide by all the provisions / acts / rules etc. of Information Technology prevalent in the country. The bidder shall conform to the standards laid down in TENDER in totality.

27. Intellectual Property Rights

No services covered under the contract shall be sold or disposed by the bidder in violation of any right whatsoever of third party, and in particular, but without prejudice to the generality of the foregoing, of any patent right, trademark or similar right, or any charge mortgage or lien. The bidder shall indemnify the THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal from all actions, costs, claims, demands, expenses and liabilities, whatsoever, resulting from any actual or alleged infringement as aforesaid and at the expenses of the bidder, defended in the defense of any proceedings which may be brought in that connection.

28. Assignment

The bidder shall not assign the project to any other agency, in whole or in part, to perform its obligation under the Contract, without the THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal prior written consent.

29. Legal Jurisdiction

All legal disputes between the parties shall be subject to the jurisdiction of the Bhopal, Madhya Pradesh. In case of any dispute or difference arising out of or in relation to this agreement, same will be referred to arbitration of an Arbitrator (other than the employee of the THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh) to be appointed by the THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh and whose decision shall be final and binding upon the bidder. The arbitration will be governed by Arbitration & Conciliation Act' 1996.

30. Notice

Any notice, request or consent required or permitted to be given or made pursuant to this contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the party to whom the communication is addressed, or when sent to such party at the address mentioned in the Contract Agreement.

31. Limitations of Liabilities

Either party will accept liability without limit. For death or personal injury caused to the order party by its negligence or the negligence of its employees acting in the course of their employment;

Any other liability which by law either party cannot exclude. This does not in any way confer greater rights than what either party would otherwise have at law.

The contract does not contemplate any consequential, indirect, loss profit, claim for tort or similar damages of any form to be paid by the bidder to THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh or any other organizations.

Notwithstanding anything to the contrary contained in this contract, in no event will the bidder be liable, Bhopal, Madhya Pradesh, whether a claim be in tort, contract or otherwise; for any amount in excess of 100% of the total professional fees payable for the respective project provided that this limitation shall not apply to any obligation of bidder to indemnify to THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh with respect to intellectual property right infringement.

No action regardless of form, arising out of this Contract may be brought by either party more than one year after the cause of action has accrued

32. Progress of the Project.

The bidder would be required to intimate the progress of the project to Executive Engineer (C), THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh in a frequency and manner prescribed by Executive Engineer THE MP STATE COOPERATIVE MARKETING FEDERATION LTD. Bhopal, Madhya Pradesh in consultation with the bidder after the award of contract.

33. Miscellaneous

The end product of the work assignment carried out by the bidder, in any form, will be the sole property of THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, Madhya Pradesh.

34. Bidding Procedure & Evaluation

Department Name, Madhya Pradesh constitute an evaluation committee to evaluate the bids. Evaluation conducted by the committee shall be final and binding on all the bidders.

The evaluation committee may choose to conduct technical negotiations or discussions with any or all the bidders. The decision of the evaluation committee in the evaluation of the Technical & Financial bids shall be final and binding on all the parties. No correspondence will be entertained outside the process of negotiation / discussion with the evaluation committee. Information relating to the examination, clarification, evaluation and comparison of the bid document and recommendations (if any) shall not be disclosed by the evaluation committee to the bidders or any other persons (other than officers / advisors of Department Name, Madhya Pradesh or as required by applicable law) not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the tender evaluation committee's processing of bids or award decisions may result in the rejection of the bid.

35. Preliminary Scrutiny

Department Name, Madhya Pradesh will prepare a list of firms based on the compliance to all the terms and conditions of the tender. The tenders who do not conform to the tender conditions shall be straight away rejected. All eligible tenders will be considered for further evaluation. The decision of Department Name, Madhya Pradesh will be final in this regard.

36 Payment

- i) THE MP STATE COOPERATIVE MARKETING FEDERATION LTD., Bhopal, will release the 70% of the total project cost against the delivery of the material, rest of the payment will be released on installation.
- ii) The Performance guarantee period will be of 1 Year + Time of Contract Period 15 Months +3 Months.
- iii) Performance guarantee (Security) shall be valid up to - Three months beyond the completion of Defect Liability Period (Maintenance Guarantee Period) 1 Year + Time of Contract Period 15 Months + 3 Months.
- iv) Security Deposit to be deducted from each running bill - At the rate of 5% of Gross Amount of Running Bill.
- v) Maximum limit of deduction of Security Deposit - Up to 5% of Final Contract Amount.
- vi) Refund of Security Deposit - The total Security Deposit deducted from the running bill shall be refunded (Equivalent BG released) only after the completion of the Performance Guarantee period (1 year + 15 months+3 months) /Extended Performance Guarantee period, if any.

37 Validity of Bid

Offers should be kept open for acceptance for at least 120 days from the date of opening. Those who do not agree for a validity of 120 days will do so at their own risk and no request for extending the validity is likely to be made from this office. However, if due to any circumstances, beyond control, bidders are advised to extend the validity, they shall not be permitted to revise their rates, offer any rebate or concession while extending the validity which may materially result in any reduction or increase in the computed prices of their original offer

Performa & Annexure

Annexure-TI (Technical Bid Letter)

To

Dated:/ /

THE MP STATE
COOPERATIVE
MARKETING
FEDERATION LTD.,
Bhopal.462003
Madhya Pradesh

Sub: CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.

Dear Madam/Sir,

1. A ll information to your request of proposal document no. _____, dated ____ / ____ / ____ I/we have examined the bid document and understood the contents, hereby submit our proposal for the aforesaid project. The proposal is unconditional and qualified.
2. All information provided in the proposal and appendices is true and correct.
3. This statement is made for the express purpose of qualifying as a bidder for undertaking the Project.
4. I/We shall make available to the tendering authority for any additional information it may find necessary or require to supplement or authenticate the bid.
5. I/We acknowledge the right of tendering authority to reject our proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
6. I/We declare that:
 - (i) I/We have examined and have no reservations to the RFP Documents, including any addendum issued by the tendering authority.
 - (ii) I/We hereby certify that we have taken steps to ensure that, no person acting for us or on our behalf has engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
7. I/We declare that we are not a member of any other firm submitting a proposal for this project.
8. I/We certify that in regard to matters other than security and integrity of the country, we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.
9. I/We further certify that in regards to matters relating to security and integrity of the country, we have not been charge-sheeted by any of the agency of the government or convicted by a Court of Law for any offence committed by us or any of our associates.

10. I/We further certify that no investigation by a regulatory authority is pending either against us or against our associates or against our CEO or any of our Directors.
11. In the event of my/ our being declared as the successful, I/We agree to enter into an agreement in accordance with the draft that has been provided to in the RFP document. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
12. The fee has been quoted by me/us after taking into consideration all the terms and conditions Stated in the RFP.
13. I/We agree and understand that the Proposal is subject to the provisions of the RFP documents. In no case, I/We shall have any claim or right of whatsoever nature if the project is not awarded to me/us pr our proposal is not opened.
14. I/We agree to keep this offer valid for 120 days from the proposal due date specified in the RFP.
15. I/We agree and undertake to abide by all the terms and conditions of the RFP document. In witness thereof, I/we sublilit this Proposal under and in accordance with the terms of the RFP document.

Yours faithfully,

(Authorized signatory)

Name:

Designation:

Financial Bid Format- Submitted Online only

S. No.	Particulars	Details
(A)	General information	
1	Name of company	
2	Address	
3	Postal Code	
4	Phone Number	
5	Email Address	
6	Contact Person Name & Designation	
7	Year of Establishment	
8	Registration Number	
9	Type of Bidder(Manufacture /Tired / Production /Re-seller/ System Integrator)	
10	Small/Medium/Large (As per Act)	
(B)	Tax Related information	
11	CST Registration Number	
12	Excise Registration Number	
13	LST Registration Number	
14	VAT Registration Number	
15	Service Tax Registration Number/GST	
16	PAN Number	
17	TAN Number	
(C)	Financial Information	
18	Annual Turnover (2020-21) Rs. In Lac	
	Annual Turnover (2021-22) Rs. In Lac	
	Annual Turnover (2022-23) Rs. In Lac	
19	Profit & LOSS (2020-21)	
	Profit & Loss (2021-22)	
	Profit & Loss (2022-23)	

B. Experience Details #

S.N	Name & address of the Client where services have been/are being rendered #	Period		End Customer Details	Project Details	Project Value in INR
		From	To			
1						
2						
3						

Attach separate sheet duly signed necessary and attested copies of certificates/agreements

CHECKLIST			
SN	Description	Documents submitted Yes/No	Page No
1.	Bidders Incorporation Certificate		
2.	Bidders GST Certificate		
3.	Bidders Audited Balance Sheet of last years		
4.	Bidder Non-Black listed Declaration		
5.	Bidders Experience Certificate		
6.	Bidders EPF & ESIC Challan		
7.	MAF		
8.	Bidders Toll free number details		

LETTER OF ACCEPTANCE (LOA)

No. _____

Dated: _____

To,

M/S. _____

(Name and address of the contractor)

Subject: _____

(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the Governor of Madhya Pradesh at your bided percentage below/ above or at par the Bill of Quantities and item wise rates given therein.

You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:

- a. **The performance security/performance guarantee** of Rs. _____ (in figure) Rupees _____ in words only) The performance security shall be in the shape of term deposit receipt/ bank guarantee of any nationalized / schedule commercial bank valid up to three months after the expiry of defects liability period.
- b. Sign the contract agreement.

Please note that the time allowed for carrying out the work as entered in the bid is _____ months including/ excluding rainy season, shall be reckoned from the date of signing the contract agreement.

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required. Therefore, after signing of the agreement, you are directed to contact the Engineer-incharge for taking the possession of site and necessary instructions to start the work.

Yours Faithfully

**Chief Engineer (C)
M.P. State Co-Operative Mktg.
Fedn. Ltd., Bhopal.**

PERFORMANCE SECURITY

To,

_____[name of employer]

_____[address of employer]

WHEREAS _____ [name and address of contractor] (Hereinafter called "the contractor") has undertaken, in pursuance of Letter of Acceptance No. _____ dated _____ to execute _____ [name of contract and brief description of Works] (hereinafter called "the contractor")

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of [amount of guarantee] * (in words), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification,

This guarantee shall be valid until 3 (three) months from the date of expiry of the Defect Liability Period.

Signature, Name and Seal of the guarantor

Name of Bank_____
Address_____
Phone No., Fax No., E-mail Address, of Signing Authority_____
Date

* An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

I I AFFIDAVIT I I

(To be Contained in Envelope A)

(On Non Judicial Stamp of Rs. 100)

I/we _____ who is/ are _____ (status in the firm/ company) and competent for submission of the affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and state that:

I/we am/are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. _____ for _____ (name of work) dated _____ issued by the (name of the department).

I/we am/ are fully responsible for the correctness of following self-certified information/ documents and certificates:

1. That the self-certified information given in the bid document is fully true and authentic.
2. That:
 - a. Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.
 - b. Information regarding financial qualification and annual turnover is correct.
 - c. Information regarding various technical qualifications is correct.
3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name _____ Post _____ Present Posting

Signature with Seal of the Deponent (bidder)

I/ we, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 4 are correct to the best of my knowledge and belief.

Verified today _____ (dated) at _____ (place)

Signature with Seal of the Deponent (bidder)

Note: Affidavit duly notarized in original shall reach at least one calendar day before opening of the bid.

ORGANIZATIONAL DETAILS
(To be Contained in Envelope - A)

S. No.	Particulars	Details
1.	Registration number issued by Centralized Registration System of Govt. of M.p. or proof of application for registration.	(If applicable, scanned copy of proof of application for registration to be uploaded)
2.	Valid Registration of bidder in appropriate class through Centralized Registration of Govt. of MP	Registration No. _____ Date _____ (Scanned copy of Registration to be uploaded)
3.	Name of Organization/ Individual/ Proprietary Firm/ Partnership Firm	
4.	Entity of Organization Individual/ Proprietary Firm/ Partnership Firm (Registered under Partnership Act)/ Limited Company (Registered under the Companies Act— 1956)/ Corporation/ Joint Venture	
5.	Address of Communication	
6.	Telephone Number with STD Code	
7.	Fax Number with STD Code	
8.	Mobile Number	
9.	E-mail Address for all communications	
10.	Details of Authorized Representative	
11.	Name	
12.	Designation	
13.	Postal Address	
14.	Telephone Number with STD Code	
15.	Fax Number with STD Code	
16.	Mobile Number	
17.	E-mail Address	

Note: In case of partnership firm and limited company certified copy of partnership deed/ Articles of Association and Memorandum of Association along with registration certificate of the company shall have to be enclosed.

Signature of Bidder with Seal

Date: _____

AGREEMENT FORM**AGREEMENT**

This agreement, made on the _____ day of _____ between _____ (name and address of Employer) (hereinafter called "the Employer) and _____ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute and identification number of Contract) (hereinafter called "the Works") and the (name Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. _____

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract. .
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - i. Letter of Acceptance
 - ii. Contractor's Bid
 - iii. Condition of Contract: General and Special
 - iv. Contract Data
 - v. Bid Data
 - vi. Drawings
 - vii. Bill of Quantities and
 - viii. Any other documents listed in the Contract Data as forming part of the

Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____ was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said _____ in the presence of:

Binding Signature of Employer _____

Binding Signature of Contractor _____

TECHNICAL SPECIFICATION & REQUIREMENTS

Solution Architecture

Following is only suggestive areas and numbers. Actual ground situation may be different. There will be approximately 5 to 8 CCTV cameras per Location outpost.

Locations where CCTV cameras to be installed in M.P State Co-operative Marketing Federation Ltd.

- All entry and exit points
- Inside Godown
- Office Area

Assumptions: -

- As per above mentioned locations approximately
 - Fix dome, 4 fix bullet cameras set up are considered per godowns for 500 MT.
 - Fix dome, 4 fix bullet cameras set up are considered per godowns for 550 MT.
 - Fix dome, 4 fix bullet cameras set up are considered per godowns for 600 MT.
 - Fix dome, 4 fix bullet cameras set up are considered per godowns for 800 MT.
 - Fix dome, 4 fix bullet cameras set up are considered per godowns for 1000 MT.
 - Fix dome, 6 fix bullet cameras set up are considered per godowns for 1100 MT.
 - Fix dome, 6 fix bullet cameras set up are considered per godowns for 1250 MT.
 - Fix dome, 6 fix bullet cameras set up are considered per godowns for 1500 MT.
 - Fix dome, 6 fix bullet cameras set up are considered per godowns for 2000 MT.
 - Fix dome, 7 fix bullet cameras set up are considered per godowns for 3000 MT.
 - Fix dome, 7 fix bullet cameras set up are considered per godowns for 4000 MT.
 - Fix dome, 7 fix bullet cameras set up are considered per godowns for 5000 MT.

Note:-15-20 Days storage should be on-premises.

FUNCTIONAL REQUIREMENTS

Major user requirements in the project

1. 1. 4-8 IP based night vision/IR and audio enabled CCTV cameras in 163 locations of Godown outpost usually mounted on wall / roof focusing on Godown and office area.
2. All cameras connected to the NVR through 10 port Network switch also providing power 10 camera on POE or through the same CAT 6 cable.
3. All cables are to be securely fitted and fixed. All wiring has to be in conduit pipes to protect it from intentional disruption.
4. Recording, storage and retrieval of last 1 month video feed through a NVR system
5. All video feed to be date, time, location and camera stamped and has to be temper-proof. Thus the video must be capable to withstand judiccia scrutiny in any court of law.
6. Camera should go into hibernation when there is no activity for defined time to save on storage space and transmission bandwidth and should wake up as soon as there is motion or activity or entry / exit of any object in its viewing area. And in recording playback it should clearly visible about no motion/camera hibernation period.
7. The NVR at warehouse is to be configured in such a manner that no external device can be connected to it and no data record can be taken out of its storage by anyone except the person duly authorized by the administrator. Similarly, no external software, hardware can be connected or loaded on to it.

BOQ for GODOWNS / Warehouses

S.No	Name of Equipment / Item as proposed for project and that will be supplied	Make, Model No. & Year of Manufacturing	Total Quantity
1.	IP based 4MP resolution (2560 × 1440), Dome Camera: H.265 4MP IR Vandal Proof Dome N/W Camera and inbuilt Audio mic as per the specification mentioned in the RFP		163
2.	IP based 4 MP resolution (2560 × 1440), Bullet Camera: H.265 4MP IR Vandal Proof Bullet N/W Camera and inbuilt Audio mic as per the specification mentioned in the RFP		749
3.	16 CH NVR with Intuitive and user-friendly (GUI), Windows style operation by mouse, Dual stream technology for local storage with high definition, remote network transmission and remote surveillance, Multi-type recording: manual / timed / motion / sensor / POS / AI Playback: 16 CH simultaneous playback, with required Surveillance Hard Disk.		163
4.	8 Port POE Network Switch		208
5.	CAT 6 cable (305 mtrs Box)		208
6.	Network Router		163
7.	Wall mount Network rack with accessories 4U		208
8.	Supply, Installation, Testing and Commissioning of IP based 5MP resolution, Corner Camera, Resolution: Sony newest 5MP IMX675		45
9.	Wall mount Network rack with accessories 9U		163
10.	2KVA UPS with 30 mins backup		163

Technical Qualification

3.1 Technical Qualification

	OEM Prequalification Criteria	Documents Required
1	The CCTV OEM authorized should have its toll free number with mobile app for any technical support query from the SI or end customer which is very much required for such a big project	Toll free numbers should be mentioned in the manufacturer's authorization letter and submitted along with the bid
2	The CCTV OEM authorized should have its toll free number in India For any technical support query from the SI or end customer with the mobile application based ticketing website for logging calls and obtain service docket / ticket status. Technical support number should be mentioned in the manufacturer's authorization letter and submitted along with the bid	Toll free numbers should be mentioned in the manufacturer's authorization letter and submitted along with the bid .
3	The MAC address of the ip cameras must be registered in the name of OEM	Proof to be provided by the OEM
4	The CCTV OEM must have self on service center for last 5 years from the date of submission of bid (not as joint venture partnership firm or through any other association)	OEM's GST registration document clearly mentioning service tax number to be given as a proof
5	The proposed camera OEM should be member in any of the present "ONVIF Organization Committee i.e Steering Committee /Technical Committee or Technical Service Committee or full membership for last 4 year	Proof to be provided by the OEM
6	The OEM for IP cameras and VMS should have a registered entity and direct presence in India for more than 10 years as on bid submission date and should be present globally in the same line of manufacturing for the last 15 years. Camera NVR OEM should submit a declaration letter along with Letter of incorporation confirming the same	Camera OEM should submit a declaration letter along with letter of incorporation confirming the same
7	The OEM of major items (like CCTV camera of all types, VMS, Server, Storages switches etc.) its sister concerns, or any of its group company or Subsidiary should not have been blacklisted in last 10 years by any Ministry under Government of India or by Government of any state in India or any other government PSUs as on tender floating date	Certificate affidavit mentioning that the bidder is not blacklisted by the any ministry under Government of India or by Government of any state in India or any of the government PSU's
8	The CCTV OEM must have executed a similar nature of work i.e, Supply of CCTV cameras to similar customer i.e, Courts or Jails with minimum 2000 number of cameras in single order	Documentary proof to be submitted
9	The CCTV OEM should have on Technical, Service Support center in India with L1,L2 and L-3 support	Documentary proof to be submitted
10	The OEM for IP cameras and VMS should have at least 50 employees on its payroll in India. Declaration letter from the HR/ Country Head/ Director/ CEO of OEM to be submitted along with the bid	Documentary proof to be submitted
11	All the camera and VR VMS and intrusion system should be from the same OEM	Undertaking from OEM and Bidder

3. TECHNICAL Specification Compliances DOME Camera With Inbuilt Mic

SN	ITEMS OF WORK	
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Qty
	Make & Model <to be provided by the bidder>	163
	Image Sensor 1 / 2.7" Progressive Scan CMOS	
	Effective Pixels 2560 × 1440	
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;	
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"	
	Shutter Speed 1 s to 1/100,000 s	
	S/N Ratio ≥52 dB	
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°	
	Focal Length 2.8 mm @ F2.0	
	Iris Type Fixed Iris	
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°	
	Video Compression H.265 / H.264	
	H.264 Compression Standard Base Line / Main Profile / High Profile	
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier	
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240	
	Max. Frame Rate 30fps @ 4MP (2560×1440)	
	Video Bit Rate 64Kbps - 5 Mbps	
	Multiple Streaming Triple streams	
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"	
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"	
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);	
	50Hz: D1/CIF/480x240 (1-25fps)"	
	Smart Codec ROI, 3 zones	
	Quality Control Five levels under VBR; Freely adjustable under CBR	
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"	
	Day & Night IR cut filter with auto switch	
	Wide Dynamic Range Yes	
	IR Distance Up to 30M	
	Digital Zoom Yes	
	Image Features Defog, BLC, HLC, 2D/3D DNR	
	Corridor Pattern Yes	
	Video Privacy 4 zones video mask	

	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and	
	line crossing"	
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,	
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"	
	Edge Storage Built-in micro SD card slot, up to 128GB	
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"	
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password	
	Online Connection Support simultaneous monitoring for up to 4 users;	
	Support multi-stream real time transmission"	
	API ONVIF Profile (S & G)	
	Network 1 RJ45 10M/100M self-adaptive Ethernet port	
	Hardware Reset Yes	
	Operating Temperature - 30 °C to 60 °C	
	Operating Humidity 10 % to 90 % relative humidity	
	Ingress Protection IP67	
	Vandal Resistance IK10	
	Power Supply DC12V / PoE	
	Power Consumption < 6W	
	Warranty 3 years	
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"	
	Immunity EN 55030-4	
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1	
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH"	
	NDAA Compliant Yes	
	BIS Certified Yes	
	Support	
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.	
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years	

IP based Bullet Camera

2	Supply and Installation of IP based Bullet Camera - Specification	Qty
	Make & Model <to be provided by the bidder>	749
	Image Sensor 1 / 2.7" Progressive Scan CMOS	
	Effective Pixels 2560 × 1440	
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"	
	Shutter Speed 1 s to 1/100,000 s	
	S/N Ratio ≥52 dB	
	Angle Adjustment Any angle	
	Focal Length 3.6 mm @ F2.2	
	Iris Type Fixed Iris	
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°	
	Lens Mount M12	
	Video Compression H.265 / H.264	
	H.264 Compression Standard Base Line / Main Profile / High Profile	
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier	
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240	
	Max. Frame Rate 30fps @ 4MP (2560×1440)	
	Video Bit Rate 64Kbps - 5 Mbps	
	Multiple Streaming Triple streams	
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"	
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"	
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"	
	Smart Codec ROI, 3 zones	
	Quality Control Five levels under VBR; Freely adjustable under CBR	
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC	
	Day & Night IR cut filter with auto switch	
	Wide Dynamic Range Yes	
	IR Distance Up to 50M	
	Digital Zoom Yes	
	Image Features Defog, BLC, HLC, 2D/3D DNR	
	Corridor Pattern Yes	
	Video Privacy 4 zones video mask	
	Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing	

	Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output	
	Edge Storage Built-in micro SD card slot, up to 128GB	
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6	
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password	
	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission	
	Remote Monitoring Webviewer browsing	
	API ONVIF Profile (S & G)	
	Network 1 RJ45 10M/100M self-adaptive Ethernet port	
	Onboard Storage Built-in micro SD/SDHC/SDXC slot	
	Hardware Reset Yes	
	Operating Temperature - 30 °C to 60 °C	
	Operating Humidity 10 % to 90 % relative humidity	
	Ingress Protection IP67	
	Vandal Resistance IK10	
	Power Supply DC12V / PoE	
	Power Consumption < 10W	
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)	
	Immunity EN 55030-4	
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1	
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH	
	Should be NDAA Compliant	
	Should be BIS Certified	
	Support	
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.	
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"	

16CH NVR with 8TB Hard Disk

	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Qty
	Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse	163
	Dual stream technology for local storage with high definition, remote network transmission and remote surveillance	
	Multi-type recording: manual / timed / motion / sensor / POS / AI recording	
	Playback: 16 CH simultaneous playback	
	Support face detection and comparison	
	Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.	
	Authorization management, log view and device status view	
	4K resolution output, more details display	
	Powerful mobile APP with IOS and Android	
	Plug and Play for PoE model	
	OS: Embedded Linux	
	HDD Interface: SATA ×8, up to 10TB for each disk	
	E-SATA Interface: e-SATA × 1	
	Storage Mode: Disk Group, RAID (RAID)	
	Redundant: Backup Group, RAID 0,1,5,6,10	
	Disk Healthy: S.M.A.R.T Information	
	Compression: H.265/H.265+/H.264/H.264+	
	IP Video Input: 16CH IPC input	
	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/ CIF	
	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)	
	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768	
	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768	
	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768	
	VGA and HDMI1 output the same video source"	
	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view) Max. 32+9CH local live view"	
	Network Input: 16 CH IPC audio input	
	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)	
	Local Output: 1-CH, RCA (Linear, 1 K)	
	Compression: G.711(u/a)	
	Record Stream: Dual stream recording	
	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/ CIF	
	Simultaneous Playback: 16CH	
	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search	
	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change	
	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom	
	Live View/ Playback: 1CH 12MP or 4CH 1080P	

	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps	
	"Camera integration: 16 CH (Facial picture captured by camera)	
	2CH (Facial picture captured by NVR)"	
	Face Match Performance: 6 CH	
	Recognition Speed: 18 facial pictures / second	
	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total	
	Picture Search: Search by picture is supported	
	Picture Adding: Web, USB stick, single picture $\leq 70\text{kb}$	
	Tracking: Tracking display on electronic Map	
	Statistic: Statistics by day, week, month, quarter as well as customized time period.	
	Camera integration: 32 CH	
	Plate Database: 50000	
	Object Classification: Edge Analysis	
	Target counting: Edge Analysis	
	Scene Change: Edge Analysis	
	Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis	
	Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis	
	Mode: Manual, sensor, motion, exception, smart events, etc.	
	Input / Output: 45032	
	Action: Record, Snapshot, Call Preset, E-mail, Buzzer	
	Interface: RJ45 1000 Mbps $\times 2$	
	Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.	
	Client Connection: Max. 128 user's access	
	Mobile Connection: iOS, Android	
	Remote Access: Web, HOLIS Pro VMS	
	ONVIF: 21.12	
	Local Backup: USB stick, USB mobile HDD	
	Network Backup: Yes	
	OS: iOS, Android	
	RS 485: 1, with full duplex, connect to PTZ or keyboard	
	USB Interface: USB 3.0 $\times 1$; USB 2.0 $\times 2$	
	Power Supply: ATX 300W(PoE)	
	Consumption: $\leq 30\text{W}$ (without HDD and PoE power supply)	
	Dimensions(mm): 445 $\times$ 436 $\times$ 90 (W $\times$ D $\times$ H)	
	Working Environment: -10 $\sim$ 50 $^{\circ}\text{C}$, 10% $\sim$ 90% humidity	
	Certificate: CE, FCC & BIS	
	Environment: RoHS	
	Support	
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.	
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.	

8 Port POE Gigabit Switch

4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Qty
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port	208
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port	
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard	
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μ s (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps	
	LEDs Indicator :Power, LINK/ACT, POE	
	POE Pin :1/2(+) 3/6(-)	
	Power :Total Power: 120W	
	Lightning protection :6KV	
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing	
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick	
	Certification: CE, FCC, BSMI, RoHS and cUL.	

CAT6 cable

5	Supply and Installation of CAT6 cable -Specification	Qty
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.	208
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.	
	The 4 pair Unshielded Twisted Pair cable shall be UL Listed	
	All Category 6 cables shall meet or exceed the following characteristics:	
	Mechanical Characteristics	
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.	
	Conductor Solid bare Copper	
	Conductor Diameter 0.56±0.005mm (23 AWG)	
	Insulation :High Density Polyethylene	
	Jacket FR PVC	
	Outer Diameter 6.1 mm nominal	
	Temperature Range -20° to +70°C	

Wall Mount 4 U Network Rack

6	Supply and Installation of Wall Mount 4 U Network Rack -Specification	Qty
	Product Type- Wall Mount	208
	Material - Mild Steel , Front Glass Door	
	Size-4U x 550 W x 400D	
	PUD, 1 U Cabel Manager and required accessories	

Wall Mount 9 U Network Rack

7	Supply and Installation of Wall Mount 9 U Network Rack -Specification	Qty
	Product Type- Wall Mount	163
	Material - Mild Steel , Front Glass Door	
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No	
	Size -4U 550W x 450D	
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories	

Network Router device

8	Supply and Installation of Network Router device for Network Connectivity	Qty
	Architecture : MMIPS	163
	CPU : MT7621A	
	CPU core count : 2	
	CPU nominal frequency : 880 MHz	
	CPU Threads count : 4	
	Switch chip model : MT7621A	
	Dimensions : 113 x 89 x 28 mm	
	RouterOS license : 4	
	Operating System : RouterOS	
	Size of RAM : 256 MB	
	Storage size : 16 MB	
	Storage type : FLASH	
	MTBF : Approximately 100'000 hours at 25C	
	Tested ambient temperature : -40°C to 70°C	
	IPsec hardware acceleration : Yes	
	Powering :	
	Details :	
	Number of DC inputs : 2 (DC jack, PoE-IN)	
	DC jack input Voltage : 12-57 V	
	Max power consumption : 24 W	
	Max power consumption without attachments : 6 W	
	Cooling type : Passive	
	PoE in : 802.3af/at	
	PoE in input Voltage : 12-57 V	
	PoE-out :	
	Details :	
	PoE-out ports : Ether5	
	PoE out : Passive PoE up to 57V	
	Max out per port output (input 18-30 V) : 500 mA	
	Max out per port output (input 30-57 V) : 500 mA	
	Max total out (A) : 500 mA	
	Ethernet :	
	10/100/1000 Ethernet ports : 5	
	Fiber :	
	SFP ports : 1	

2kVA UPS

Technical Specification: 2kVA		Qty
Parameters	Specification	163
UPS Capacity	2kVA	
Load Power Factor	0.6	
Features		
OVCD	Inbuilt required	
Converter Mode (CVCF)	Required	
Bypass Parameters	Configurable	
Auto Re Start	Required	
Display	LED	
Charging Profile	2 stage charging (Constant Current / Float Charge)	
Sinewave	Required	
Fan Speed Control	Yes	
Maximum charging	5A,10A,15A,20A(Factory settable)	
Input Characteristics		
Phase / Voltage	1 Phase / 230V	
Voltage	160V AC / 185V AC $\pm$ 5Vac	
Power Factor	0.6	
THDi (RCD: IEC ref non Linear Load)	< 10% @100% R Load	
Backup	30Mins	
Bypass Voltage Tolerance	170V - 264V (adjustable in front panel)	
Bypass Frequency Sync	47.5Hz - 52.5Hz	
Output Characteristics		
Voltage	220VAC / 230VAC / 240VAC $\pm$ 1%	
Crest Factor	3:1	
Output waveform	Steeped Sinewave.	
Backup time	30Mins	
Efficiency	70%	
Operating Temperature	0 - 40 deg C	
Electrical		
Input Breaker	Required	
Input Terminal	Terminal Block Required	
Output Socket	6Nos Indian type 6Amp sockets	
Mechanical		
Ingress Protection	IP 20	
Certification		
CE Certification	Required	
BIS	Required	
Night Guard Protetion	Required	

Extra Item
IP based Corner Camera

	Supply and Installation of IP based Corner Camera within built Mic-Specification	
	Resolution: Sony newest 5MP IMX675	
	Lens: 2.3mm lens	
	Full frame (TWDR On): 30/25 fps	
	FOV full coverage (H x V): 130°x 93°(no blind spots)	
	Invisible IR LED: 940 nm	
	White LED (lighting/flashing): Yes	
	Audio In / Out: 1 input, 1 output	
	Built-in Mic & Speaker: Yes	
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch	
	Wireless Setup: Micro USB	
	Analytics approach: AI based	
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection	
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes	
	AI Auto Exposure: ROI: Object, Person, Face	
	Recording Status Indicator: Yes	
	Power: PoE.af & at & DC/AC	
	Operating Temperature: -40 °C ~ 60 °C	
	Lens glass: Flat window	
	Material: Aluminium	
	Colour: RAL 9003 –Signal White	
	IP rating: IP66 / IP67 / IP68/ NEMA 4X	
	IK rating: IK11(50 joules)	
	Dimension (H x W x D): 215 x 202 x 60 mm	
	Warranty: 5 years	
	Should be NDAA Compliant	
	Support	
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.	
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years	

SN	Godown	No of Locations	No of Camera			No of NVR with HDD	Network Switch	CAT 6 Cable	Rack		Network Router	UPS
	MT Tones		Bullet Camera	Dome Camera	Corner Camera (Extra Item)			305 mtr roll	4 U	9U		
1	1000 MT	118	472	118	0	118	118	118	118	118	118	118
2	2000 MT	38	228	38	38	38	76	76	76	38	38	38
3	3000 MT	2	14	2	2	2	4	4	4	2	2	2
4	4000 MT	1	7	1	1	1	2	2	2	1	1	1
5	5000 MT	4	28	4	4	4	8	8	8	4	4	4
TOTAL		163	749	163	45	163	208	208	208	163	163	163

MANDATORY CONDITION:-

1. Cost of Bid Documents with Transaction Acknowledgement.
2. EMD (ONLY ONLINE THROUGH PORTAL) with Transaction Acknowledgement.
3. An Affidavit duly Notarized as per Annexure-T3
4. Organizational details as per Annexure T4.
5. GST Registration No.
6. The bidder should be in IT Services and registered as Proprietorship, Partnership, LLP or Company with relevant registration authority for more than Two years in India. Copy of registration certificate shall be submitted as a proof.
7. The bidder should have minimum average annual turnover of last three financial years of Rs. 5.00 Crore and must submit certified copy of the audited statement of accounts, as a proof of annual turnover stated.
8. Bidder should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Government of India / State Governments. A self-declaration certificate on the letterhead should be enclosed.
9. The bidder should have experience of execution of at least one of Rs. 4.56 Crore or two of Rs.2.28 Crore of CCTV installations and maintenance work in last three financial years.
10. The bidder should have experience in Installation & Support of CCTV peripherals of state or central departments, for which bidder should produce work order or experience letter.
11. The bidder should have registered office in Bhopal (M.P.)
12. The bidder should have EPF & ESIC compliances for last two financial years and maintain at least 10 employees on their payroll. Copy of EPF & ESIC challan should be enclosed.
13. The bidder should be a profit making entity, enclosed CA Certified copy
14. The Bidder should have Toll free number to lock the complaints.
15. The bidder must have MAF of CCTV to quote in this tender
16. Pan Card.
17. EPF Registration.
18. ESIC Registration.

ADDITIONAL CONDITION :-

- 1) The amount of EPF will be separately deducted from each Running bill and Final bill @ 4% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 2) Amount of EPF which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of EPF department.
- 3) The amount of ESIC will be separately deducted from each Running bill and Final bill @ 2% of the bill amount, which can be replaced after Final Bill by equivalent amount of Fixed Deposit Receipt assigned to the Employer, with validity upto two (02 year) of any Nationalized/Schedule Commercial Bank in favour of Engineering Section, M.P. State Co-Operative Marketing Federation Ltd., Bhopal and the fixed deposit receipt must be Auto renewal.
- 4) Amount of ESIC which is deducted from the Running and final bill shall be refunded after presenting the annual clearness report of ESIC.

List of CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division.

क्र०.	कार्य का नाम	क्षमता (मैटन)	निविदा राशि
01.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1500 MT Godown No.01 Govindpura Bhopal of Markfed.	1500	400600.00
02.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1100 MT Godown No.02 Govindpura Bhopal of Markfed.	1100	400600.00
03.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1100 MT Godown No.03 Govindpura Bhopal of Markfed.	1100	400600.00
04.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 800 MT Godown No.04 Govindpura Bhopal of Markfed.	800	233374.00
05.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 500 MT Godown No.05 Govindpura Bhopal of Markfed.	500	233374.00
06.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1000 MT Godown No.06 Govindpura Bhopal of Markfed.	1000	233374.00
07.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1000 MT Godown No.07 Govindpura Bhopal of Markfed.	1000	233374.00
08.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Cattle Feed Factory 1500 MT Godown No.08 Govindpura Bhopal of Markfed.	1500	400600.00
09.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown Phanda Distt. Bhopal of Markfed.	1000	233374.00
10.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 5000 MT Godown No.01 Govindpura Bhopal of Markfed.	5000	409720.00
11.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 4000 MT Godown No.02 Govindpura Bhopal of Markfed.	4000	409720.00
12.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 2000 MT Godown No.03 Govindpura Bhopal of Markfed.	2000	400600.00
13.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 3000 MT Godown No.04 Govindpura Bhopal of Markfed.	3000	409720.00
14.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at Fertilizer Granulation Plant 5000 MT Godown No.05 Govindpura Bhopal of Markfed.	5000	409720.00
15.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Berasia Distt. Bhopal of Markfed.	1000	233374.00
16.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Berasia Distt. Bhopal of Markfed.	1000	233374.00
17.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Obedullaganj Distt. Raigarh of Markfed.	1000	233374.00

18	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Badi Distt. Raisen of Markfed.	1000	233374.00
19	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 500 MT Godown No.01 at Salamatpur Distt. Raisen of Markfed.	500	233374.00
20	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Raisen Distt. Raisen of Markfed.	1000	233374.00
21	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Obedullaganj Distt. Raisen of Markfed.	1000	233374.00
22	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Badi Distt. Raisen of Markfed.	1000	233374.00
23	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Udaipura Distt. Raisen of Markfed.	1000	233374.00
24	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Gairatganj Distt. Raisen of Markfed.	1000	233374.00
25	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Goharganj Distt. Raisen of Markfed.	1000	233374.00
26	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Raisen Distt. Raisen of Markfed.	1000	233374.00
27	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Bareli Distt. Raisen of Markfed.	2000	400600.00
28	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Khargone Distt. Raisen of Markfed.	2000	400600.00
29	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Bareli Distt. Raisen of Markfed.	2000	400600.00
30	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Begumganj Distt. Raisen of Markfed.	2000	400600.00
31	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Gairatganj Distt. Raisen of Markfed.	1000	233374.00
32	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Sultanpur Distt. Raisen of Markfed.	1000	233374.00
33	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 500 MT Godown No.01 at Sehore Distt. Sehore of Markfed.	500	233374.00
34	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1100 MT Godown No.02 at Sehore Distt. Sehore of Markfed.	1100	400600.00
35	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Sehore Distt. Sehore of Markfed.	1000	233374.00
36	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Nasrullaganj Distt. Sehore of Markfed.	1000	233374.00
37	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ashta Distt. Sehore of Markfed.	1000	233374.00

38	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Sehore Distt. Sehore of Markfed.	1000	233374.00
39	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Mehatwada Distt. Sehore of Markfed.	1000	233374.00
40	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Shahganj Distt. Sehore of Markfed.	2000	400600.00
41	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Rehti Distt. Sehore of Markfed.	2000	400600.00
42	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Nasrullaganj Distt. Sehore of Markfed.	1000	233374.00
43	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Ichhawa Distt. Sehore of Markfed.	2000	400600.00
44	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Vidisha Distt. Vidisha of Markfed.	1000	233374.00
45	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Vidisha Distt. Vidisha of Markfed.	1000	233374.00
46	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.03 at Vidisha Distt. Vidisha of Markfed.	2000	400600.00
47	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ganjbasoda Distt. Vidisha of Markfed.	1000	233374.00
48	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Ganjbasoda Distt. Vidisha of Markfed.	1000	233374.00
49	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Sironj Distt. Vidisha of Markfed.	1000	233374.00
50	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Ganjbasoda Distt. Vidisha of Markfed.	1000	233374.00
51	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Vidisha Distt. Vidisha of Markfed.	1000	233374.00
52	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.05 at Vidisha Distt. Vidisha of Markfed.	2000	400600.00
53	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Sironj Distt. Vidisha of Markfed.	1000	233374.00
54	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.04 at Ganjbasoda Distt. Vidisha of Markfed.	2000	400600.00
55	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Shamsabad Distt. Vidisha of Markfed.	2000	400600.00
56	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.05 at Ganjbasoda Distt. Vidisha of Markfed.	2000	400600.00
57	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Kurwai Distt. Vidisha of Markfed.	1000	233374.00

58	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Gyaspur Distt. Vidisha of Markfed.	2000	400600.00
59	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Bioara Distt. Rajgarh of Markfed.	1000	233374.00
60	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Pachor Distt. Rajgarh of Markfed.	1000	233374.00
61	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Sarangpur Distt. Rajgarh of Markfed.	1000	233374.00
62	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Kurawar Distt. Rajgarh of Markfed.	1000	233374.00
63	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Bioara Distt. Rajgarh of Markfed.	1000	233374.00
64	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Rajgarh Distt. Rajgarh of Markfed.	1000	233374.00
65	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Jeerapur Distt. Rajgarh of Markfed.	1000	233374.00
66	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Kurawar Distt. Rajgarh of Markfed.	1000	233374.00
67	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Sarangpur Distt. Rajgarh of Markfed.	1000	233374.00
68	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Narsingharh Distt. Rajgarh of Markfed.	2000	400600.00
69	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Khilchipur Distt. Rajgarh of Markfed.	2000	400600.00
70	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Jeerapur Distt. Rajgarh of Markfed.	1000	233374.00
71	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Sarangpur Distt. Rajgarh of Markfed.	1000	233374.00
72	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Pachor Distt. Rajgarh of Markfed.	1000	233374.00
73	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	233374.00
74	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	233374.00
75	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Banapura Distt. Narmadapuram of Markfed.	1000	233374.00
76	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Pipariya Distt. Narmadapuram of Markfed.	1000	233374.00
77	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Pipariya Distt. Narmadapuram of Markfed.	1000	233374.00

78	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Pipariya Distt. Narmadapuram of Markfed.	1000	233374.00
79	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Itarsi (Kheda) Distt. Narmadapuram of Markfed.	1000	233374.00
80	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Babai Distt. Narmadapuram of Markfed.	1000	233374.00
81	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Hoshangabad Distt. Narmadapuram of Markfed.	1000	233374.00
82	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Banapura Distt. Narmadapuram of Markfed.	2000	400600.00
83	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Semri Harchand Distt. Narmadapuram of Markfed.	2000	400600.00
84	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Dharamkundi Distt. Narmadapuram of Markfed.	1000	233374.00
85	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Khirkiya Distt. Harda of Markfed.	1000	233374.00
86	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Timrani Distt. Harda of Markfed.	1000	233374.00
87	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Harda Distt. Harda of Markfed.	1000	233374.00
88	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Betul Distt. Betul of Markfed.	1000	233374.00
89	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Betul Distt. Betul of Markfed.	1000	233374.00
90	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Multai Distt. Betul of Markfed.	1000	233374.00
91	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Betul Distt. Betul of Markfed.	1000	233374.00
92	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Raiamla Distt. Betul of Markfed.	1000	233374.00
93	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Atner Distt. Betul of Markfed.	1000	233374.00
94	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Betul Distt. Betul of Markfed.	1000	233374.00
95	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ghodadongri Distt. Betul of Markfed.	1000	233374.00
96	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Amla Distt. Betul of Markfed.	1000	233374.00
97.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ujjain Distt. Ujjain of Markfed.	1000	233374.00

98.	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Ujjain Distt. Ujjain of Markfed.	1000	233374.00
99	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Badnagar Distt. Ujjain of Markfed.	1000	233374.00
100	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Tarana Distt. Ujjain of Markfed.	1000	233374.00
101	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Khachrod Distt. Ujjain of Markfed.	1000	233374.00
102	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Mahidpur Distt. Ujjain of Markfed.	1000	233374.00
103	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.03 at Ujjain Distt. Ujjain of Markfed.	2000	400600.00
104	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Nagda Distt. Ujjain of Markfed.	2000	400600.00
105	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Ujjain Distt. Ujjain of Markfed.	1000	233374.00
106	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.05 at Ujjain Distt. Ujjain of Markfed.	2000	400600.00
107	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Mahidpur Distt. Ujjain of Markfed.	1000	233374.00
108	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Ratlam Distt. Ratlam of Markfed.	1000	233374.00
109	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Taal Distt. Ratlam of Markfed.	1000	233374.00
110	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Alot Distt. Ratlam of Markfed.	1000	233374.00
111	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 5000 MT Godown No.01 at Jora Distt. Ratlam of Markfed.	5000	409720.00
112	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Ratlam Distt. Ratlam of Markfed.	1000	233374.00
113	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Ratlam Distt. Ratlam of Markfed.	1000	233374.00
114	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 5000 MT Godown No.04 at Ratlam Distt. Ratlam of Markfed.	5000	409720.00
115	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Taal Distt. Ratlam of Markfed.	1000	233374.00
116	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.05 at Ratlam Distt. Ratlam of Markfed.	2000	400600.00
117	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.02 at Jora Distt. Ratlam of Markfed.	2000	400600.00

118	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 550 MT Godown No.01 at Mandsaur Distt. Mandsaur of Markfed.	550	233374.00
119	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1100 MT Godown No.02 at Mandsaur Distt. Mandsaur of Markfed.	1100	400600.00
120	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Mandsaur Distt. Mandsaur of Markfed.	1000	233374.00
121	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Mandsaur Distt. Mandsaur of Markfed.	1000	233374.00
122	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 3000 MT Godown No.01 at Shamgarh Distt. Mandsaur of Markfed.	3000	409720.00
123	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.05 at Mandsaur Distt. Mandsaur of Markfed.	1000	233374.00
124	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.06 at Mandsaur Distt. Mandsaur of Markfed.	1000	233374.00
125	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.07 at Mandsaur Distt. Mandsaur of Markfed.	1000	233374.00
126	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Neemuch Distt. Neemuch of Markfed.	1000	233374.00
127	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Javad Distt. Neemuch of Markfed.	1000	233374.00
128	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Neemuch Distt. Neemuch of Markfed.	1000	233374.00
129	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Manasa Distt. Neemuch of Markfed.	2000	400600.00
130	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.03 at Neemuch Distt. Neemuch of Markfed.	2000	400600.00
131	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Neemuch Distt. Neemuch of Markfed.	1000	233374.00
132	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Kanawati (Neemuch) Distt. Neemuch of Markfed.	2000	400600.00
133	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 600 MT Godown No.01 at Dewas Distt. Dewas of Markfed.	600	233374.00
134	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1250 MT Godown No.02 at Dewas Distt. Dewas of Markfed.	1250	400600.00
135	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Dewas Distt. Dewas of Markfed.	1000	233374.00
136	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Dewas Distt. Dewas of Markfed.	1000	233374.00
137	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Sonkachh Distt. Dewas of Markfed.	1000	233374.00

138	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Khategaon Distt. Dewas of Markfed.	1000	233374.00
139	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Kannod Distt. Dewas of Markfed.	1000	233374.00
140	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Sonkachh Distt. Dewas of Markfed.	1000	233374.00
141	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Hatpipaliya Distt. Dewas of Markfed.	1000	233374.00
142	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.05 at Dewas Distt. Dewas of Markfed.	1000	233374.00
143	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.06 at Dewas Distt. Dewas of Markfed.	2000	400600.00
144	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Chapda Distt. Dewas of Markfed.	1000	233374.00
145	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.07 at Dewas Distt. Dewas of Markfed.	1000	233374.00
146	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Khatgegaon Distt. Dewas of Markfed.	1000	233374.00
147	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Shajapur Distt. Shajapur of Markfed.	1000	233374.00
148	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Shajapur Distt. Shajapur of Markfed.	1000	233374.00
149	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Shajapur Distt. Shajapur of Markfed.	1000	233374.00
150	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Shujalpur Distt. Shajapur of Markfed.	1000	233374.00
151	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Kalapipal Distt. Shajapur of Markfed.	1000	233374.00
152	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Shujalpur Distt. Shajapur of Markfed.	1000	233374.00
153	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.03 at Shujalpur Distt. Shajapur of Markfed.	1000	233374.00
154	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.04 at Shajapur Distt. Shajapur of Markfed.	1000	233374.00
155	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.05 at Shajapur Distt. Shajapur of Markfed.	1000	233374.00
156	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Badwal Distt. Shajapur of Markfed.	2000	400600.00
157	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Momanbadodiya Distt. Shajapur of Markfed.	2000	400600.00

158	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Nalkheda Distt. Shajapur of Markfed.	1000	233374.00
159	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Susner Distt. Agar of Markfed.	1000	233374.00
160	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.02 at Susner Distt. Agar of Markfed.	1000	233374.00
161	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 1000 MT Godown No.01 at Agar Distt. Agar of Markfed.	1000	233374.00
162	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Magraniya Distt. Agar of Markfed.	2000	400600.00
163	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at 2000 MT Godown No.01 at Paankhedi Distt. Agar of Markfed.	2000	400600.00
	Total Amount		45628972.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:52:33 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 500 MT					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				

	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		4	9120.8	36483.2
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				

S/N Ratio ≥ 52 dB				
Angle Adjustment Any angle				
Focal Length 3.6 mm @ F2.2				
Iris Type Fixed Iris				
Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
Lens Mount M12				
Video Compression H.265 / H.264				
H.264 Compression Standard Base Line / Main Profile / High Profile				
H.265 Compression Standard Main Profile @ Level 4.1 High Tier				
Resolution 4MP(2560×1440), 1080P(1920×1080), 720P(1280×720), D1, CIF, 480 x 240				
Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				

	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				

·	Storage Mode: Disk Group, RAID (RAID)				
·	Redundant: Backup Group, RAID 0,1,5,6,10				
·	Disk Healthy: S.M.A.R.T Information				
·	Compression: H.265/H.265+/H.264/H.264+				
·	IP Video Input: 16CH IPC input				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
·	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA and HDMI1 output the same video source"				
·	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
·	Max. 32+9CH local live view"				
·	Network Input: 16 CH IPC audio input				
·	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
·	Local Output: 1-CH, RCA (Linear, 1 K)				
·	Compression: G.711(u/a)				
·	Record Stream: Dual stream recording				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Simultaneous Playback: 16CH				
·	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search				
·	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change				
·	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom				
·	Live View/ Playback: 1CH 12MP or 4CH 1080P				
·	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps				
·	"Camera integration: 16 CH (Facial picture captured by camera)				
·	2CH (Facial picture captured by NVR)"				
·	Face Match Performance: 6 CH				
·	Recognition Speed: 18 facial pictures / second				
·	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total				
·	Picture Search: Search by picture is supported				
·	Picture Adding: Web, USB stick, single picture ≤ 70kb				
·	Tracking: Tracking display on electronic Map				
·	Statistic: Statistics by day, week, month, quarter as well as customized time period.				

	· Camera integration: 32 CH				
	· Plate Database: 50000				
	· Object Classification: Edge Analysis				
	· Target counting: Edge Analysis				
	· Scene Change: Edge Analysis				
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Mode: Manual, sensor, motion, exception, smart events, etc.				
	· Input / Output: 45032				
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	· Interface: RJ45 1000 Mbps × 2				
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	· Client Connection: Max. 128 user's access				
	· Mobile Connection: iOS, Android				
	· Remote Access: Web, HOLIS Pro VMS				
	· ONVIF: 21.12				
	· Local Backup: USB stick, USB mobile HDD				
	· Network Backup: Yes				
	· OS: iOS, Android				
	· RS 485: 1, with full duplex, connect to PTZ or keyboard				
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	· Power Supply: ATX 300W(PoE)				
	· Consumption: ≤ 30W (without HDD and PoE power supply)				
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port		1	8850	8850
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port				
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard				
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μs (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps				

	LEDs Indicator :Power, LINK/ACT, POE				
	POE Pin :1/2(+) 3/6(-)				
	Power :Total Power: 120W				
	Lightning protection :6KV				
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
5	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			1	9100	9100
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
6	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	3500	3500
	Material - Mild Steel , Front Glass Door				
	Size-4U x 550 W x 400D				
	PUD, 1 U Cabel Manager and required accessories				
7	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel , Front Glass Door				
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No				
	Size -4U 550W x 450D				
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories				
8	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
9	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC ± 5Vac				

	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC ± 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC ± 5Vac				
	High loss/ Come back :300V AC / 290V AC ± 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Total without Tax			₹ 233,374.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:53:12 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 550 MT					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				

	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		4	9120.8	36483.2
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				

S/N Ratio ≥ 52 dB				
Angle Adjustment Any angle				
Focal Length 3.6 mm @ F2.2				
Iris Type Fixed Iris				
Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
Lens Mount M12				
Video Compression H.265 / H.264				
H.264 Compression Standard Base Line / Main Profile / High Profile				
H.265 Compression Standard Main Profile @ Level 4.1 High Tier				
Resolution 4MP(2560×1440), 1080P(1920×1080), 720P(1280×720), D1, CIF, 480 x 240				
Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				

	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				

·	Storage Mode: Disk Group, RAID (RAID)				
·	Redundant: Backup Group, RAID 0,1,5,6,10				
·	Disk Healthy: S.M.A.R.T Information				
·	Compression: H.265/H.265+/H.264/H.264+				
·	IP Video Input: 16CH IPC input				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
·	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA and HDMI1 output the same video source"				
·	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
·	Max. 32+9CH local live view"				
·	Network Input: 16 CH IPC audio input				
·	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
·	Local Output: 1-CH, RCA (Linear, 1 K)				
·	Compression: G.711(u/a)				
·	Record Stream: Dual stream recording				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Simultaneous Playback: 16CH				
·	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search				
·	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change				
·	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom				
·	Live View/ Playback: 1CH 12MP or 4CH 1080P				
·	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps				
·	"Camera integration: 16 CH (Facial picture captured by camera)				
·	2CH (Facial picture captured by NVR)"				
·	Face Match Performance: 6 CH				
·	Recognition Speed: 18 facial pictures / second				
·	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total				
·	Picture Search: Search by picture is supported				
·	Picture Adding: Web, USB stick, single picture ≤ 70kb				
·	Tracking: Tracking display on electronic Map				
·	Statistic: Statistics by day, week, month, quarter as well as customized time period.				

	· Camera integration: 32 CH				
	· Plate Database: 50000				
	· Object Classification: Edge Analysis				
	· Target counting: Edge Analysis				
	· Scene Change: Edge Analysis				
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Mode: Manual, sensor, motion, exception, smart events, etc.				
	· Input / Output: 45032				
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	· Interface: RJ45 1000 Mbps × 2				
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	· Client Connection: Max. 128 user's access				
	· Mobile Connection: iOS, Android				
	· Remote Access: Web, HOLIS Pro VMS				
	· ONVIF: 21.12				
	· Local Backup: USB stick, USB mobile HDD				
	· Network Backup: Yes				
	· OS: iOS, Android				
	· RS 485: 1, with full duplex, connect to PTZ or keyboard				
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	· Power Supply: ATX 300W(PoE)				
	· Consumption: ≤ 30W (without HDD and PoE power supply)				
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port		1	8850	8850
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port				
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard				
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μs (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps				

	LEDs Indicator :Power, LINK/ACT, POE				
	POE Pin :1/2(+) 3/6(-)				
	Power :Total Power: 120W				
	Lightning protection :6KV				
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
5	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			1	9100	9100
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
6	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	3500	3500
	Material - Mild Steel , Front Glass Door				
	Size-4U x 550 W x 400D				
	PUD, 1 U Cabel Manager and required accessories				
7	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel , Front Glass Door				
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No				
	Size -4U 550W x 450D				
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories				
8	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
9	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC ± 5Vac				

	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC ± 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC ± 5Vac				
	High loss/ Come back :300V AC / 290V AC ± 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Total without Tax			₹ 233,374.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:53:58 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 600 MT					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				

	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		4	9120.8	36483.2
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				

S/N Ratio ≥ 52 dB				
Angle Adjustment Any angle				
Focal Length 3.6 mm @ F2.2				
Iris Type Fixed Iris				
Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
Lens Mount M12				
Video Compression H.265 / H.264				
H.264 Compression Standard Base Line / Main Profile / High Profile				
H.265 Compression Standard Main Profile @ Level 4.1 High Tier				
Resolution 4MP(2560×1440), 1080P(1920×1080), 720P(1280×720), D1, CIF, 480 x 240				
Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				

	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				

·	Storage Mode: Disk Group, RAID (RAID)				
·	Redundant: Backup Group, RAID 0,1,5,6,10				
·	Disk Healthy: S.M.A.R.T Information				
·	Compression: H.265/H.265+/H.264/H.264+				
·	IP Video Input: 16CH IPC input				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
·	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA and HDMI1 output the same video source"				
·	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
·	Max. 32+9CH local live view"				
·	Network Input: 16 CH IPC audio input				
·	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
·	Local Output: 1-CH, RCA (Linear, 1 K)				
·	Compression: G.711(u/a)				
·	Record Stream: Dual stream recording				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Simultaneous Playback: 16CH				
·	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search				
·	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change				
·	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom				
·	Live View/ Playback: 1CH 12MP or 4CH 1080P				
·	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps				
·	"Camera integration: 16 CH (Facial picture captured by camera)				
·	2CH (Facial picture captured by NVR)"				
·	Face Match Performance: 6 CH				
·	Recognition Speed: 18 facial pictures / second				
·	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total				
·	Picture Search: Search by picture is supported				
·	Picture Adding: Web, USB stick, single picture ≤ 70kb				
·	Tracking: Tracking display on electronic Map				
·	Statistic: Statistics by day, week, month, quarter as well as customized time period.				

	· Camera integration: 32 CH				
	· Plate Database: 50000				
	· Object Classification: Edge Analysis				
	· Target counting: Edge Analysis				
	· Scene Change: Edge Analysis				
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Mode: Manual, sensor, motion, exception, smart events, etc.				
	· Input / Output: 45032				
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	· Interface: RJ45 1000 Mbps × 2				
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	· Client Connection: Max. 128 user's access				
	· Mobile Connection: iOS, Android				
	· Remote Access: Web, HOLIS Pro VMS				
	· ONVIF: 21.12				
	· Local Backup: USB stick, USB mobile HDD				
	· Network Backup: Yes				
	· OS: iOS, Android				
	· RS 485: 1, with full duplex, connect to PTZ or keyboard				
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	· Power Supply: ATX 300W(PoE)				
	· Consumption: ≤ 30W (without HDD and PoE power supply)				
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port		1	8850	8850
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port				
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard				
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μs (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps				

	LEDs Indicator :Power, LINK/ACT, POE				
	POE Pin :1/2(+) 3/6(-)				
	Power :Total Power: 120W				
	Lightning protection :6KV				
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
5	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			1	9100	9100
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
6	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	3500	3500
	Material - Mild Steel , Front Glass Door				
	Size-4U x 550 W x 400D				
	PUD, 1 U Cabel Manager and required accessories				
7	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel , Front Glass Door				
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No				
	Size -4U 550W x 450D				
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories				
8	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
9	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC ± 5Vac				

	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC ± 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC ± 5Vac				
	High loss/ Come back :300V AC / 290V AC ± 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Total without Tax			₹ 233,374.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:54:34 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 800 MT					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				

	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		4	9120.8	36483.2
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				

S/N Ratio ≥ 52 dB				
Angle Adjustment Any angle				
Focal Length 3.6 mm @ F2.2				
Iris Type Fixed Iris				
Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
Lens Mount M12				
Video Compression H.265 / H.264				
H.264 Compression Standard Base Line / Main Profile / High Profile				
H.265 Compression Standard Main Profile @ Level 4.1 High Tier				
Resolution 4MP(2560×1440), 1080P(1920×1080), 720P(1280×720), D1, CIF, 480 x 240				
Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				

	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				

·	Storage Mode: Disk Group, RAID (RAID)				
·	Redundant: Backup Group, RAID 0,1,5,6,10				
·	Disk Healthy: S.M.A.R.T Information				
·	Compression: H.265/H.265+/H.264/H.264+				
·	IP Video Input: 16CH IPC input				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
·	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA and HDMI1 output the same video source"				
·	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
·	Max. 32+9CH local live view"				
·	Network Input: 16 CH IPC audio input				
·	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
·	Local Output: 1-CH, RCA (Linear, 1 K)				
·	Compression: G.711(u/a)				
·	Record Stream: Dual stream recording				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Simultaneous Playback: 16CH				
·	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search				
·	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change				
·	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom				
·	Live View/ Playback: 1CH 12MP or 4CH 1080P				
·	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps				
·	"Camera integration: 16 CH (Facial picture captured by camera)				
·	2CH (Facial picture captured by NVR)"				
·	Face Match Performance: 6 CH				
·	Recognition Speed: 18 facial pictures / second				
·	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total				
·	Picture Search: Search by picture is supported				
·	Picture Adding: Web, USB stick, single picture ≤ 70kb				
·	Tracking: Tracking display on electronic Map				
·	Statistic: Statistics by day, week, month, quarter as well as customized time period.				

	· Camera integration: 32 CH				
	· Plate Database: 50000				
	· Object Classification: Edge Analysis				
	· Target counting: Edge Analysis				
	· Scene Change: Edge Analysis				
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Mode: Manual, sensor, motion, exception, smart events, etc.				
	· Input / Output: 45032				
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	· Interface: RJ45 1000 Mbps × 2				
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	· Client Connection: Max. 128 user's access				
	· Mobile Connection: iOS, Android				
	· Remote Access: Web, HOLIS Pro VMS				
	· ONVIF: 21.12				
	· Local Backup: USB stick, USB mobile HDD				
	· Network Backup: Yes				
	· OS: iOS, Android				
	· RS 485: 1, with full duplex, connect to PTZ or keyboard				
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	· Power Supply: ATX 300W(PoE)				
	· Consumption: ≤ 30W (without HDD and PoE power supply)				
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port		1	8850	8850
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port				
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard				
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μs (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps				

	LEDs Indicator :Power, LINK/ACT, POE				
	POE Pin :1/2(+) 3/6(-)				
	Power :Total Power: 120W				
	Lightning protection :6KV				
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
5	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			1	9100	9100
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
6	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	3500	3500
	Material - Mild Steel , Front Glass Door				
	Size-4U x 550 W x 400D				
	PUD, 1 U Cabel Manager and required accessories				
7	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel , Front Glass Door				
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No				
	Size -4U 550W x 450D				
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories				
8	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
9	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC ± 5Vac				

	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC ± 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC ± 5Vac				
	High loss/ Come back :300V AC / 290V AC ± 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Total without Tax			₹ 233,374.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:55:10 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 1000 MT					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				

	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		4	9120.8	36483.2
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				

S/N Ratio ≥ 52 dB				
Angle Adjustment Any angle				
Focal Length 3.6 mm @ F2.2				
Iris Type Fixed Iris				
Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
Lens Mount M12				
Video Compression H.265 / H.264				
H.264 Compression Standard Base Line / Main Profile / High Profile				
H.265 Compression Standard Main Profile @ Level 4.1 High Tier				
Resolution 4MP(2560×1440), 1080P(1920×1080), 720P(1280×720), D1, CIF, 480 x 240				
Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				

	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of 16CH NVR with 8TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				

·	Storage Mode: Disk Group, RAID (RAID)				
·	Redundant: Backup Group, RAID 0,1,5,6,10				
·	Disk Healthy: S.M.A.R.T Information				
·	Compression: H.265/H.265+/H.264/H.264+				
·	IP Video Input: 16CH IPC input				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
·	"Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
·	VGA and HDMI1 output the same video source"				
·	"Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
·	Max. 32+9CH local live view"				
·	Network Input: 16 CH IPC audio input				
·	2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
·	Local Output: 1-CH, RCA (Linear, 1 K)				
·	Compression: G.711(u/a)				
·	Record Stream: Dual stream recording				
·	Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960 H/D1/CIF				
·	Simultaneous Playback: 16CH				
·	Playback Mode: Camera Thumbnails / Time / Event / tag / smart search				
·	Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change				
·	Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom				
·	Live View/ Playback: 1CH 12MP or 4CH 1080P				
·	Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps				
·	"Camera integration: 16 CH (Facial picture captured by camera)				
·	2CH (Facial picture captured by NVR)"				
·	Face Match Performance: 6 CH				
·	Recognition Speed: 18 facial pictures / second				
·	Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total				
·	Picture Search: Search by picture is supported				
·	Picture Adding: Web, USB stick, single picture ≤ 70kb				
·	Tracking: Tracking display on electronic Map				
·	Statistic: Statistics by day, week, month, quarter as well as customized time period.				

	· Camera integration: 32 CH				
	· Plate Database: 50000				
	· Object Classification: Edge Analysis				
	· Target counting: Edge Analysis				
	· Scene Change: Edge Analysis				
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	· Mode: Manual, sensor, motion, exception, smart events, etc.				
	· Input / Output: 45032				
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	· Interface: RJ45 1000 Mbps × 2				
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	· Client Connection: Max. 128 user's access				
	· Mobile Connection: iOS, Android				
	· Remote Access: Web, HOLIS Pro VMS				
	· ONVIF: 21.12				
	· Local Backup: USB stick, USB mobile HDD				
	· Network Backup: Yes				
	· OS: iOS, Android				
	· RS 485: 1, with full duplex, connect to PTZ or keyboard				
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	· Power Supply: ATX 300W(PoE)				
	· Consumption: ≤ 30W (without HDD and PoE power supply)				
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
4	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Network Interface : 8 10/100/1000Mbps PoE RJ45 port , 2 10/100/1000Mbps uplink RJ45 port		1	8850	8850
	Transmission Rate :10/100/1000Mbps Each port supports MDI / MDIX auto-flip and auto, Network interface:10BASE-T or 100BASE-TX Ethernet RJ-45 port				
	Protocols and Standards :IEEE802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE802.3x Flow Control, IEEE 802.3af/at standard				
	Performance: Bandwidth: 20 Gbps (no block), Network delay (100 to 100M bps): maximum 20 μs (using 64byte packet), Frame filtering and transmission rate, 10M: 14,800pps, 100M: 148,800pps, 1000M: 1488,00pps				

	LEDs Indicator :Power, LINK/ACT, POE				
	POE Pin :1/2(+) 3/6(-)				
	Power :Total Power: 120W				
	Lightning protection :6KV				
	Environmental norms :Operating Temperature: 0°~40°C Storage Temperature: -10°C~70°C, Operating Humidity: 10%~90% non-condensing, Storage Humidity: 5%~90% non-condensing				
	EMC : CE Class B, FCC Part 15, Class B, VCCI Class B, C-Tick				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
5	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			1	9100	9100
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
6	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	3500	3500
	Material - Mild Steel , Front Glass Door				
	Size-4U x 550 W x 400D				
	PUD, 1 U Cabel Manager and required accessories				
7	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel , Front Glass Door				
	Fan-Roof Monted Fan Unit /90 CFM/ 230V AC -1 No				
	Size -4U 550W x 450D				
	PUD, Cabel Manager, 2 Pairs of 19" Mounting Rails, Plate and required accessories				
8	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
9	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC ± 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC ± 5Vac				

	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC ± 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC ± 5Vac				
	High loss/ Come back :300V AC / 290V AC ± 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Total without Tax			₹ 233,374.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:56:00 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 1100 MTGodown					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				

	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		6	9120.8	54724.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				

Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
Remote Monitoring Webviewer browsing				
API ONVIF Profile (S & G)				
Network 1 RJ45 10M/100M self-adaptive Ethernet port				
Onboard Storage Built-in micro SD/SDHC/SDXC slot				
Hardware Reset Yes				
Operating Temperature - 30 °C to 60 °C				
Operating Humidity 10 % to 90 % relative humidity				
Ingress Protection IP67				
Vandal Resistance IK10				
Power Supply DC12V / PoE				
Power Consumption < 10W				
Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
Immunity EN 55030-4				
Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				

	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				
	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				

- Plug and Play for PoE model
- OS: Embedded Linux
- HDD Interface: SATA ×8, up to 10TB for each disk
- E-SATA Interface: e-SATA × 1
- Storage Mode: Disk Group, RAID (RAID)
- Redundant: Backup Group, RAID 0,1,5,6,10
- Disk Healthy: S.M.A.R.T Information
- Compression: H.265/H.265+/H.264/H.264+
- IP Video Input: 16CH IPC input
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)
- "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768
- HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA and HDMI1 output the same video source"
- "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36
- (live view) AUX output: 1/4/6/8/9 (live view)
- Max. 32+9CH local live view"
- Network Input: 16 CH IPC audio input
- 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)
- Local Output: 1-CH, RCA (Linear, 1 K)
- Compression: G.711(u/a)
- Record Stream: Dual stream recording
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Simultaneous Playback: 16CH
- Playback Mode: Camera Thumbnails / Time / Event / tag / smart search
- Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change
- Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom
- Live View/ Playback: 1CH 12MP or 4CH 1080P
- Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps
- "Camera integration: 16 CH (Facial picture captured by camera)
- 2CH (Facial picture captured by NVR)"
- Face Match Performance: 6 CH
- Recognition Speed: 18 facial pictures / second
- Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total
- Picture Search: Search by picture is supported
- Picture Adding: Web, USB stick, single picture ≤ 70kb
- Tracking: Tracking display on electronic Map
- Statistic: Statistics by day, week, month, quarter as well as customized time period.
- Camera integration: 32 CH
- Plate Database: 50000

[illegible]

	Object Classification: Edge Analysis				
	Target counting: Edge Analysis				
	Scene Change: Edge Analysis				
	Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Mode: Manual, sensor, motion, exception, smart events, etc.				
	Input / Output: 45032				
	Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	Interface: RJ45 1000 Mbps × 2				
	Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	Client Connection: Max. 128 user's access				
	Mobile Connection: iOS, Android				
	Remote Access: Web, HOLIS Pro VMS				
	ONVIF: 21.12				
	Local Backup: USB stick, USB mobile HDD				
	Network Backup: Yes				
	OS: iOS, Android				
	RS 485: 1, with full duplex, connect to PTZ or keyboard				
	USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	Power Supply: ATX 300W(PoE)				
	Consumption: ≤ 30W (without HDD and PoE power supply)				
	Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	Certificate: CE, FCC & BIS				
	Environment: RoHS				
	Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				

	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				
	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				

	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				

	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC ± 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 400,600.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:56:27 IST
Location: Madhya Pradesh-MP

Estimate for CCTV works of 1250 MTGodown					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				

	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		6	9120.8	54724.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				

Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
Remote Monitoring Webviewer browsing				
API ONVIF Profile (S & G)				
Network 1 RJ45 10M/100M self-adaptive Ethernet port				
Onboard Storage Built-in micro SD/SDHC/SDXC slot				
Hardware Reset Yes				
Operating Temperature - 30 °C to 60 °C				
Operating Humidity 10 % to 90 % relative humidity				
Ingress Protection IP67				
Vandal Resistance IK10				
Power Supply DC12V / PoE				
Power Consumption < 10W				
Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
Immunity EN 55030-4				
Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				

	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				
	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				

- Plug and Play for PoE model
- OS: Embedded Linux
- HDD Interface: SATA ×8, up to 10TB for each disk
- E-SATA Interface: e-SATA × 1
- Storage Mode: Disk Group, RAID (RAID)
- Redundant: Backup Group, RAID 0,1,5,6,10
- Disk Healthy: S.M.A.R.T Information
- Compression: H.265/H.265+/H.264/H.264+
- IP Video Input: 16CH IPC input
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)
- "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768
- HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA and HDMI1 output the same video source"
- "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36
- (live view) AUX output: 1/4/6/8/9 (live view)
- Max. 32+9CH local live view"
- Network Input: 16 CH IPC audio input
- 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)
- Local Output: 1-CH, RCA (Linear, 1 K)
- Compression: G.711(u/a)
- Record Stream: Dual stream recording
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Simultaneous Playback: 16CH
- Playback Mode: Camera Thumbnails / Time / Event / tag / smart search
- Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change
- Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom
- Live View/ Playback: 1CH 12MP or 4CH 1080P
- Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps
- "Camera integration: 16 CH (Facial picture captured by camera)
- 2CH (Facial picture captured by NVR)"
- Face Match Performance: 6 CH
- Recognition Speed: 18 facial pictures / second
- Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total
- Picture Search: Search by picture is supported
- Picture Adding: Web, USB stick, single picture ≤ 70kb
- Tracking: Tracking display on electronic Map
- Statistic: Statistics by day, week, month, quarter as well as customized time period.
- Camera integration: 32 CH
- Plate Database: 50000

[illegible]

	Object Classification: Edge Analysis				
	Target counting: Edge Analysis				
	Scene Change: Edge Analysis				
	Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Mode: Manual, sensor, motion, exception, smart events, etc.				
	Input / Output: 45032				
	Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	Interface: RJ45 1000 Mbps × 2				
	Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	Client Connection: Max. 128 user's access				
	Mobile Connection: iOS, Android				
	Remote Access: Web, HOLIS Pro VMS				
	ONVIF: 21.12				
	Local Backup: USB stick, USB mobile HDD				
	Network Backup: Yes				
	OS: iOS, Android				
	RS 485: 1, with full duplex, connect to PTZ or keyboard				
	USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	Power Supply: ATX 300W(PoE)				
	Consumption: ≤ 30W (without HDD and PoE power supply)				
	Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	Certificate: CE, FCC & BIS				
	Environment: RoHS				
	Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				

	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				
	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				

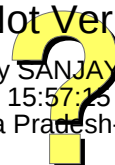
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				

	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 400,600.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:57:13 IST
Location: Madhya Pradesh-MP



Estimate for CCTV works of 1500 MTGodown					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				

	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZA 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		6	9120.8	54724.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				

Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
Remote Monitoring Webviewer browsing				
API ONVIF Profile (S & G)				
Network 1 RJ45 10M/100M self-adaptive Ethernet port				
Onboard Storage Built-in micro SD/SDHC/SDXC slot				
Hardware Reset Yes				
Operating Temperature - 30 °C to 60 °C				
Operating Humidity 10 % to 90 % relative humidity				
Ingress Protection IP67				
Vandal Resistance IK10				
Power Supply DC12V / PoE				
Power Consumption < 10W				
Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
Immunity EN 55030-4				
Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				

	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				
	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				

- Plug and Play for PoE model
- OS: Embedded Linux
- HDD Interface: SATA ×8, up to 10TB for each disk
- E-SATA Interface: e-SATA × 1
- Storage Mode: Disk Group, RAID (RAID)
- Redundant: Backup Group, RAID 0,1,5,6,10
- Disk Healthy: S.M.A.R.T Information
- Compression: H.265/H.265+/H.264/H.264+
- IP Video Input: 16CH IPC input
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)
- "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768
- HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA and HDMI1 output the same video source"
- "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36
- (live view) AUX output: 1/4/6/8/9 (live view)
- Max. 32+9CH local live view"
- Network Input: 16 CH IPC audio input
- 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)
- Local Output: 1-CH, RCA (Linear, 1 K)
- Compression: G.711(u/a)
- Record Stream: Dual stream recording
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Simultaneous Playback: 16CH
- Playback Mode: Camera Thumbnails / Time / Event / tag / smart search
- Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change
- Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom
- Live View/ Playback: 1CH 12MP or 4CH 1080P
- Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps
- "Camera integration: 16 CH (Facial picture captured by camera)
- 2CH (Facial picture captured by NVR)"
- Face Match Performance: 6 CH
- Recognition Speed: 18 facial pictures / second
- Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total
- Picture Search: Search by picture is supported
- Picture Adding: Web, USB stick, single picture ≤ 70kb
- Tracking: Tracking display on electronic Map
- Statistic: Statistics by day, week, month, quarter as well as customized time period.
- Camera integration: 32 CH
- Plate Database: 50000

[illegible]

	Object Classification: Edge Analysis				
	Target counting: Edge Analysis				
	Scene Change: Edge Analysis				
	Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Mode: Manual, sensor, motion, exception, smart events, etc.				
	Input / Output: 45032				
	Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	Interface: RJ45 1000 Mbps × 2				
	Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	Client Connection: Max. 128 user's access				
	Mobile Connection: iOS, Android				
	Remote Access: Web, HOLIS Pro VMS				
	ONVIF: 21.12				
	Local Backup: USB stick, USB mobile HDD				
	Network Backup: Yes				
	OS: iOS, Android				
	RS 485: 1, with full duplex, connect to PTZ or keyboard				
	USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	Power Supply: ATX 300W(PoE)				
	Consumption: ≤ 30W (without HDD and PoE power supply)				
	Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	Certificate: CE, FCC & BIS				
	Environment: RoHS				
	Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				

	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				
	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				

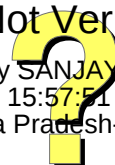
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				

	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 400,600.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:57:51 IST
Location: Madhya Pradesh-MP



Estimate for CCTV works of 2000 MTGdown					
SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				

	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		6	9120.8	54724.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				

Max. Frame Rate 30fps @ 4MP (2560×1440)				
Video Bit Rate 64Kbps - 5 Mbps				
Multiple Streaming Triple streams				
Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
Smart Codec ROI, 3 zones				
Quality Control Five levels under VBR; Freely adjustable under CBR				
Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
Day & Night IR cut filter with auto switch				
Wide Dynamic Range Yes				
IR Distance Up to 50M				
Digital Zoom Yes				
Image Features Defog, BLC, HLC, 2D/3D DNR				
Corridor Pattern Yes				
Video Privacy 4 zones video mask				
Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
Edge Storage Built-in micro SD card slot, up to 128GB				
Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
Remote Monitoring Webviewer browsing				
API ONVIF Profile (S & G)				
Network 1 RJ45 10M/100M self-adaptive Ethernet port				
Onboard Storage Built-in micro SD/SDHC/SDXC slot				
Hardware Reset Yes				
Operating Temperature - 30 °C to 60 °C				
Operating Humidity 10 % to 90 % relative humidity				
Ingress Protection IP67				
Vandal Resistance IK10				
Power Supply DC12V / PoE				
Power Consumption < 10W				
Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
Immunity EN 55030-4				
Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				

	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				
	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk-SPECIFICATIONS	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				

- Plug and Play for PoE model
- OS: Embedded Linux
- HDD Interface: SATA ×8, up to 10TB for each disk
- E-SATA Interface: e-SATA × 1
- Storage Mode: Disk Group, RAID (RAID)
- Redundant: Backup Group, RAID 0,1,5,6,10
- Disk Healthy: S.M.A.R.T Information
- Compression: H.265/H.265+/H.264/H.264+
- IP Video Input: 16CH IPC input
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)
- "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768
- HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768
- VGA and HDMI1 output the same video source"
- "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36
- (live view) AUX output: 1/4/6/8/9 (live view)
- Max. 32+9CH local live view"
- Network Input: 16 CH IPC audio input
- 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)
- Local Output: 1-CH, RCA (Linear, 1 K)
- Compression: G.711(u/a)
- Record Stream: Dual stream recording
- Resolution:
 - 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/
 - D1/CIF
- Simultaneous Playback: 16CH
- Playback Mode: Camera Thumbnails / Time / Event / tag / smart search
- Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change
- Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom
- Live View/ Playback: 1CH 12MP or 4CH 1080P
- Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps
- "Camera integration: 16 CH (Facial picture captured by camera)
- 2CH (Facial picture captured by NVR)"
- Face Match Performance: 6 CH
- Recognition Speed: 18 facial pictures / second
- Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total
- Picture Search: Search by picture is supported
- Picture Adding: Web, USB stick, single picture ≤ 70kb
- Tracking: Tracking display on electronic Map
- Statistic: Statistics by day, week, month, quarter as well as customized time period.
- Camera integration: 32 CH
- Plate Database: 50000

[illegible]

	Object Classification: Edge Analysis				
	Target counting: Edge Analysis				
	Scene Change: Edge Analysis				
	Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis				
	Mode: Manual, sensor, motion, exception, smart events, etc.				
	Input / Output: 45032				
	Action: Record, Snapshot, Call Preset, E-mail, Buzzer				
	Interface: RJ45 1000 Mbps × 2				
	Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.				
	Client Connection: Max. 128 user's access				
	Mobile Connection: iOS, Android				
	Remote Access: Web, HOLIS Pro VMS				
	ONVIF: 21.12				
	Local Backup: USB stick, USB mobile HDD				
	Network Backup: Yes				
	OS: iOS, Android				
	RS 485: 1, with full duplex, connect to PTZ or keyboard				
	USB Interface: USB 3.0 × 1; USB 2.0 × 2				
	Power Supply: ATX 300W(PoE)				
	Consumption: ≤ 30W (without HDD and PoE power supply)				
	Dimensions(mm): 445 × 436 × 90 (W × D × H)				
	Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity				
	Certificate: CE, FCC & BIS				
	Environment: RoHS				
	Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				

	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				
	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				

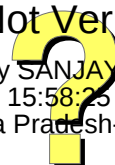
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				

	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				
	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				

	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				
	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 400,600.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:58:23 IST
Location: Madhya Pradesh-MP



Estimate for CCTV works of 3000 MT

SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				

	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		7	9120.8	63845.6
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				

	IR Distance Up to 50M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
	Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				

	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk- SPECIFICATION	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				
	· Storage Mode: Disk Group, RAID (RAID)				
	· Redundant: Backup Group, RAID 0,1,5,6,10				
	· Disk Healthy: S.M.A.R.T Information				
	· Compression: H.265/H.265+/H.264/H.264+				
	· IP Video Input: 16CH IPC input				
	· Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/ CIF				
	· Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
	· "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA and HDMI1 output the same video source"				
	· "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
	· Max. 32+9CH local live view"				
	· Network Input: 16 CH IPC audio input				
	· 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
	· Local Output: 1-CH, RCA (Linear, 1 K)				

	· Compression: G.711(u/a)			
	· Record Stream: Dual stream recording			
	· Resolution:			
	12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/CIF			
	· Simultaneous Playback: 16CH			
	· Playback Mode: Camera Thumbnails / Time / Event / tag / smart search			
	· Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change			
	· Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom			
	· Live View/ Playback: 1CH 12MP or 4CH 1080P			
	· Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps			
	· "Camera integration: 16 CH (Facial picture captured by camera)			
	· 2CH (Facial picture captured by NVR)"			
	· Face Match Performance: 6 CH			
	· Recognition Speed: 18 facial pictures / second			
	· Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total			
	· Picture Search: Search by picture is supported			
	· Picture Adding: Web, USB stick, single picture ≤ 70kb			
	· Tracking: Tracking display on electronic Map			
	· Statistic: Statistics by day, week, month, quarter as well as customized time period.			
	· Camera integration: 32 CH			
	· Plate Database: 50000			
	· Object Classification: Edge Analysis			
	· Target counting: Edge Analysis			
	· Scene Change: Edge Analysis			
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Mode: Manual, sensor, motion, exception, smart events, etc.			
	· Input / Output: 45032			
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer			
	· Interface: RJ45 1000 Mbps × 2			
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPs, 802.1x, RTSP, SNMP, ONVIF, etc.			
	· Client Connection: Max. 128 user's access			
	· Mobile Connection: iOS, Android			
	· Remote Access: Web, HOLIS Pro VMS			
	· ONVIF: 21.12			
	· Local Backup: USB stick, USB mobile HDD			
	· Network Backup: Yes			
	· OS: iOS, Android			
	· RS 485: 1, with full duplex, connect to PTZ or keyboard			
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2			
	· Power Supply: ATX 300W(PoE)			
	· Consumption: ≤ 30W (without HDD and PoE power supply)			
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)			
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity			

	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				
	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				

	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				

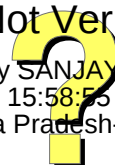
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				
	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				

	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				

	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 409,720.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:58:53 IST
Location: Madhya Pradesh-MP



Estimate for CCTV works of 4000 MT

SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				

	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		7	9120.8	63845.6
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				

	IR Distance Up to 50M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
	Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				

	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk- SPECIFICATION	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				
	· Storage Mode: Disk Group, RAID (RAID)				
	· Redundant: Backup Group, RAID 0,1,5,6,10				
	· Disk Healthy: S.M.A.R.T Information				
	· Compression: H.265/H.265+/H.264/H.264+				
	· IP Video Input: 16CH IPC input				
	· Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/ CIF				
	· Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
	· "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA and HDMI1 output the same video source"				
	· "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
	· Max. 32+9CH local live view"				
	· Network Input: 16 CH IPC audio input				
	· 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
	· Local Output: 1-CH, RCA (Linear, 1 K)				

	· Compression: G.711(u/a)			
	· Record Stream: Dual stream recording			
	· Resolution:			
	12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/CIF			
	· Simultaneous Playback: 16CH			
	· Playback Mode: Camera Thumbnails / Time / Event / tag / smart search			
	· Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change			
	· Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom			
	· Live View/ Playback: 1CH 12MP or 4CH 1080P			
	· Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps			
	· "Camera integration: 16 CH (Facial picture captured by camera)			
	· 2CH (Facial picture captured by NVR)"			
	· Face Match Performance: 6 CH			
	· Recognition Speed: 18 facial pictures / second			
	· Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total			
	· Picture Search: Search by picture is supported			
	· Picture Adding: Web, USB stick, single picture ≤ 70kb			
	· Tracking: Tracking display on electronic Map			
	· Statistic: Statistics by day, week, month, quarter as well as customized time period.			
	· Camera integration: 32 CH			
	· Plate Database: 50000			
	· Object Classification: Edge Analysis			
	· Target counting: Edge Analysis			
	· Scene Change: Edge Analysis			
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Mode: Manual, sensor, motion, exception, smart events, etc.			
	· Input / Output: 45032			
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer			
	· Interface: RJ45 1000 Mbps × 2			
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPs, 802.1x, RTSP, SNMP, ONVIF, etc.			
	· Client Connection: Max. 128 user's access			
	· Mobile Connection: iOS, Android			
	· Remote Access: Web, HOLIS Pro VMS			
	· ONVIF: 21.12			
	· Local Backup: USB stick, USB mobile HDD			
	· Network Backup: Yes			
	· OS: iOS, Android			
	· RS 485: 1, with full duplex, connect to PTZ or keyboard			
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2			
	· Power Supply: ATX 300W(PoE)			
	· Consumption: ≤ 30W (without HDD and PoE power supply)			
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)			
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity			

	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				
	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				

	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				

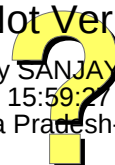
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				
	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				

	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				

	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 409,720.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 15:59:27 IST
Location: Madhya Pradesh-MP



Estimate for CCTV works of 5000 MT

SN	ITEMS OF WORK				
1	Supply and Installation of IP based DOME Camera with in built Mic-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		1	9120.8	9120.8
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	"Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON;				
	Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Pan : 0°-355°, Tilt : 0°-67°, Rotation : 0°-355°				
	Focal Length 2.8 mm @ F2.0				
	Iris Type Fixed Iris				
	Field of View 2.8 mm @F2.0, horizontal field of view:110°,Vertical: 77.6°				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps); 50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps);				
	50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC"				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				
	IR Distance Up to 30M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	"Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing"				
	"Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict,				
	illegal login, SD Card full, SD Card error, Alarm input, Alarm output"				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6"				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users;				
	Support multi-stream real time transmission"				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				

	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 6W				
	Warranty 3 years				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3,				
	IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)"				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2,				
	IEC 62321-8), WEEE, REACH"				
	NDAA Compliant Yes				
	BIS Certified Yes				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
2	Supply and Installation of IP based Bullet Camera - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Make & Model <to be provided by the bidder>		7	9120.8	63845.6
	Image Sensor 1 / 2.7" Progressive Scan CMOS				
	Effective Pixels 2560 × 1440				
	Min. Illumination Color: 0.01 Lux @ F1.2, AGC ON; Color: 0.04 Lux @ F2.2, AGC ON; 0 lux with IR"				
	Shutter Speed 1 s to 1/100,000 s				
	S/N Ratio ≥52 dB				
	Angle Adjustment Any angle				
	Focal Length 3.6 mm @ F2.2				
	Iris Type Fixed Iris				
	Field of View 3.6 mm@F2.2, horizontal field of view: 89°, Vertical: 58°				
	Lens Mount M12				
	Video Compression H.265 / H.264				
	H.264 Compression Standard Base Line / Main Profile / High Profile				
	H.265 Compression Standard Main Profile @ Leve4.1 High Tier				
	Resolution 4MP(2560×1440), 1080P(1920x1080), 720P(1280x720), D1, CIF, 480 x 240				
	Max. Frame Rate 30fps @ 4MP (2560×1440)				
	Video Bit Rate 64Kbps - 5 Mbps				
	Multiple Streaming Triple streams				
	Main Stream 60Hz: 4MP/3MP/1080P(1-30fps);50Hz: 4MP/3MP/1080P(1-25fps)"				
	Sub Stream 60Hz: 720P(1-15fps)/D1 /CIF (1-30fps); 50Hz: 720P(1-12fps)/D1/CIF (1-25fps)"				
	Third Stream 60Hz: D1/CIF/480x240 (1-30fps); 50Hz: D1/CIF/480x240 (1-25fps)"				
	Smart Codec ROI, 3 zones				
	Quality Control Five levels under VBR; Freely adjustable under CBR				
	Image Setting time stamp, text overlay, flip & mirror, ROI, Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, white balance, video rotation, Scheduled profile settings, AGC				
	Day & Night IR cut filter with auto switch				
	Wide Dynamic Range Yes				

	IR Distance Up to 50M				
	Digital Zoom Yes				
	Image Features Defog, BLC, HLC, 2D/3D DNR				
	Corridor Pattern Yes				
	Video Privacy 4 zones video mask				
	Intelligent Video Analytics Object removal (object left/missing detection), scene change and video blur detection, intrusion and line crossing				
	Alarm Triggers Motion detection, Intelligent video analytics, Network disconnect, video tampering, IP address conflict, illegal login, SD Card full, SD Card error, Alarm input, Alarm output				
	Edge Storage Built-in micro SD card slot, up to 128GB				
	Network Protocol TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, UPnP, Unicast, Multicast, ICMP, HTTP, HTTPS, DNS, DDNS, RTP, RTCP, IGMP, 802.1X, QoS, Ipv4, Ipv6				
	Cyber Security HTTPS / IP Filter / IEEE 802.1X / Blacklist & whitelist / account security / telnet access control / serial password				
	Online Connection Support simultaneous monitoring for up to 4 users; Support multi-stream real time transmission				
	Remote Monitoring Webviewer browsing				
	API ONVIF Profile (S & G)				
	Network 1 RJ45 10M/100M self-adaptive Ethernet port				
	Onboard Storage Built-in micro SD/SDHC/SDXC slot				
	Hardware Reset Yes				
	Operating Temperature - 30 °C to 60 °C				
	Operating Humidity 10 % to 90 % relative humidity				
	Ingress Protection IP67				
	Vandal Resistance IK10				
	Power Supply DC12V / PoE				
	Power Consumption < 10W				
	Emissions FCC Part 15.107 Class A, FCC Part 15.109 Class A , EN 55032, EN 55035 (IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8)				
	Immunity EN 55030-4				
	Safety UL 62368-1, IEC 62368-1 EN 62368-1, CAN/CSA C22.2 No. 62368-1-14, J62368-1, AS/NZS 62368.1				
	Environment RoHS (IEC 62321-3-1, IEC 62321-5, IEC 62321-4, IEC 62321-6, IEC 62321-7, IEC 62321-7-2, IEC 62321-8), WEEE, REACH				
	Should be NDAA Compliant				
	Should be BIS Certified				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years"				
3	Supply and Installation of IP based Corner Camera with in built Mic- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Resolution: Sony newest 5MP IMX675		1	127534	127534
	Lens: 2.3mm lens				
	Full frame (TWDR On): 30/25 fps				
	FOV full coverage (H x V): 130°x 93°(no blind spots)				
	Invisible IR LED: 940 nm				
	White LED (lighting/flashing): Yes				
	Audio In / Out: 1input, 1 output				
	Built-in Mic & Speaker: Yes				
	Alarm In & Out, Casing Open: 1 input & 1 output, Casing Open with tamper switch				
	Wireless Setup: Micro USB				
	Analytics approach: AI based				
	Video: Pixel-based: Motion, AI Tamper (EIS)AI Blur, AI Face detection				
	Video AI: Object Classification, Vehicle, Person, Cart, Handbag/Backpack/Suitcase, Total 11 object classes				

	AI Auto Exposure: ROI: Object, Person, Face				
	Recording Status Indicator: Yes				
	Power: PoE.af & at & DC/AC				
	Operating Temperature: -40 °C ~ 60 °C				
	Lens glass: Flat window				
	Material: Aluminum				
	Color: RAL 9003 –Signal White				
	IP rating: IP66 / IP67 / IP68/ NEMA 4X				
	IK rating: IK11(50 joules)				
	Dimension (H x W x D): 215 x 202 x 60 mm				
	Warranty: 5 years				
	Should be NDAA Compliant				
	Support				
	The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll Free number.				
	The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years				
4	Supply and Installation of 16CH NVR with 12TB Hard Disk- SPECIFICATION	Compliance Yes/ No	Qty	Unit Price	Total
	· Intuitive and user-friendly Graphic User Interface (GUI), Windows style operation by mouse		1	67500	67500
	· Dual stream technology for local storage with high definition, remote network transmission and remote surveillance				
	· Multi-type recording: manual / timed / motion / sensor / POS / AI recording				
	· Playback: 16 CH simultaneous playback				
	· Support face detection and comparison				
	· Support multiple VCA (Video Content Analytics) events, such as object abandoned/missing, intrusion, tripwire, video scenes change, etc.				
	· Authorization management, log view and device status view				
	· 4K resolution output, more details display				
	· Powerful mobile APP with IOS and Android				
	· Plug and Play for PoE model				
	· OS: Embedded Linux				
	· HDD Interface: SATA ×8, up to 10TB for each disk				
	· E-SATA Interface: e-SATA × 1				
	· Storage Mode: Disk Group, RAID (RAID)				
	· Redundant: Backup Group, RAID 0,1,5,6,10				
	· Disk Healthy: S.M.A.R.T Information				
	· Compression: H.265/H.265+/H.264/H.264+				
	· IP Video Input: 16CH IPC input				
	· Resolution: 12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/ CIF				
	· Network Bandwidth: 192Mbps/192Mbps (incoming/outgoing)				
	· "Output: HDMI1: 3840 × 2160/1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· HDMI2: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768				
	· VGA and HDMI1 output the same video source"				
	· "Multi-screen Display: Main output: 1/4/6/8/9/13/16/25/32/36 (live view) AUX output: 1/4/6/8/9 (live view)				
	· Max. 32+9CH local live view"				
	· Network Input: 16 CH IPC audio input				
	· 2-way Audio: 1-CH, RCA (2.0 Vp-p, 1 K)				
	· Local Output: 1-CH, RCA (Linear, 1 K)				

	· Compression: G.711(u/a)			
	· Record Stream: Dual stream recording			
	· Resolution:			
	12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/CIF			
	· Simultaneous Playback: 16CH			
	· Playback Mode: Camera Thumbnails / Time / Event / tag / smart search			
	· Smart Search: Human body, Vehicle, Face, Plate, Line Crossing, Intrusion, Object Abandoned, Object Abandoned (Missing), Scene Change			
	· Function: Play, Pause, Fast Forward, Fast Backward, Digital Zoom			
	· Live View/ Playback: 1CH 12MP or 4CH 1080P			
	· Frame Rate: 12MP: 20fps; 8MP or lower resolution: NTSC: 30fps; PAL:25fps			
	· "Camera integration: 16 CH (Facial picture captured by camera)			
	· 2CH (Facial picture captured by NVR)"			
	· Face Match Performance: 6 CH			
	· Recognition Speed: 18 facial pictures / second			
	· Face Picture Database: Up to 32 groups, with up to 10000 facial pictures in total			
	· Picture Search: Search by picture is supported			
	· Picture Adding: Web, USB stick, single picture ≤ 70kb			
	· Tracking: Tracking display on electronic Map			
	· Statistic: Statistics by day, week, month, quarter as well as customized time period.			
	· Camera integration: 32 CH			
	· Plate Database: 50000			
	· Object Classification: Edge Analysis			
	· Target counting: Edge Analysis			
	· Scene Change: Edge Analysis			
	· Intrusion: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Line Crossing: 16 Ch for edge analysis; 2 CH for NVR analysis			
	· Mode: Manual, sensor, motion, exception, smart events, etc.			
	· Input / Output: 45032			
	· Action: Record, Snapshot, Call Preset, E-mail, Buzzer			
	· Interface: RJ45 1000 Mbps × 2			
	· Protocol: TCP / IP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPs, 802.1x, RTSP, SNMP, ONVIF, etc.			
	· Client Connection: Max. 128 user's access			
	· Mobile Connection: iOS, Android			
	· Remote Access: Web, HOLIS Pro VMS			
	· ONVIF: 21.12			
	· Local Backup: USB stick, USB mobile HDD			
	· Network Backup: Yes			
	· OS: iOS, Android			
	· RS 485: 1, with full duplex, connect to PTZ or keyboard			
	· USB Interface: USB 3.0 × 1; USB 2.0 × 2			
	· Power Supply: ATX 300W(PoE)			
	· Consumption: ≤ 30W (without HDD and PoE power supply)			
	· Dimensions(mm): 445 × 436 × 90 (W × D × H)			
	· Working Environment: -10 ~ 50 °C, 10% ~ 90% humidity			

	· Certificate: CE, FCC & BIS				
	· Environment: RoHS				
	· Support				
	1. The OEM shall have a self-owned support Service Center and RMA in India from last 5 years and Toll-Free number.				
	2. The OEM shall be registered in India for more than 10 Years and present globally for more than 20 years.				
5	Supply and Installation of 8 Port POE Gigabit Switch-Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Switch with at least 8 X RJ-45 Gigabit Ethernet PoE Ports and additional 2x 1G SFP Ports.		2	8850	17700
	Switching capacity should be 20Gbps or higher or non-blocking architecture.				
	Switch packet forwarding rate should be 14.88 Mpps or higher or non-blocking architecture.				
	Switch MAC table should be at least 8K or higher.				
	Switch should be standard 19 inch 1U rack mountable.				
	Support for the Energy Efficient Ethernet (IEEE 802.3az) standard.				
	Switch should delivered 802.3at PoE+ and 802.3af PoE power to any of the RJ-45 ports.				
	The total power available for PoE switch should be 130W or higher.				
	Power input should be 100 to 240 VAC, 50/60 Hz, internal power supply.				
	Operating temperature should be -5 degree celsius to +50 degree celsius.				
	Certification: CE, FCC, BSMI, RoHS and cUL.				
	Switch Software Specification				
	Should support Head of Line blocking prevention for lower latency and better performance.				
	Support Jumbo Frame up to 10K Bytes or higher.				
	Should support IGMP Snooping, Able to create 250 or more IGMP groups and require support for IGMP Snooping Fast Leave, IGMP Snooping Querier				
	Should support MLD Snooping, Able to create 250 or more MLD groups, Per VLAN MLD Snooping and require support for MLD Snooping Fast Leave.				
	Should have 802.1D STP, 802.1w RSTP and 802.1s MSTP Spanning Tree Protocol.				
	Should support Spanning tree Root restriction				
	Should support Link aggregation with maximum 4 groups per device and 8 ports per group				
	Should support Loopback detection (LBD) to detect the loop created by a specific port.				
	Should support Multicast Filtering to filters or forward all unregistered groups.				
	Switch should support IEEE 802.1Q VLAN tagging for Ethernet frames.				
	Different type of VLAN like Port based, Auto Surveillance, Auto Voice, Asymmetric Vlan etc. should be available for configuration.				
	Switch should support QoS (quality of service) IEEE 802.1P for traffic prioritization. It should support 8 queues per port.				
	Different type of QoS priority like Strict Priority Queue and Weighted Round Robin.				

	Port based ingress / egress rate limit function should be available with limit in increments as low as 16 Kbps.				
	Switch should support Neighbour Discovery (ND) protocol for IPv6.				
	Switch should support to create at least 4 IP interface				
	Should support default routing and static routing with minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries.				
	Support at least 700 access control entries. Each entry should be applied on single / multiple ports with permit / deny action.				
	Should support port security to secures the access port based on MAC address.				
	should have broadcast, multicast, and unicast storm control to prevents faulty end stations from degrading overall systems performance.				
	Support Traffic Segmentation to restricted traffic flow from a single or group of ports, to another group of ports.				
	Should have SSH and SSL for IPv4 and IPv6.				
	Require prevention of DoS attacks, which include Land, Blat, TCP Null Scan, TCP Xmas Scan and TCP SYNFIN.				
	Should support 802.1X port-based authentication.				
	Should support ARP spoofing prevention.				
	Should support DHCP snooping and DHCP server screening.				
	Switch should able to create a binding table for IP + MAC + Port to prevents a malicious user from spoofing or to restrict the unauthorized users.				
	Should support 802.1X RADIUS and local server database authentication.				
	Should have option to check the status of copper cables using the cable-diagnostics time domain reflectometer (TDR).				
	Able to manage trough Web-GUI, Compact CLI and Telnet.				
	Should support SNMP v1, v2c, v3 and SNMP Traps and Remote Monitoring (RMON).				
	Should have dual Image support to reduced down time for the switches.				
	Switch should support dynamic host configuration protocol (DHCP) auto configuration of multiple switches through a boot server eases switch deployment.				
	Should have SNTP/NTP protocol for time synchronization.				
	Switch should be IPv6 Ready Compliance.				
	Should support Link Layer Discovery Protocol (LLDP) and LLDP-MED.				
	Note				
	Switch should be supplied with the all-necessary components like Power cord, Rack- mount bracket, Installation Guide, etc. and necessary software image file to fulfil all above mention feature set from day 1.				
	Approved Make: OEM should available in Gartner Magic Quadrant for Wired and Wireless LAN Access Infrastructure Report				
6	Supply and Installation of CAT6 cable -Specification	Compliance Yes/ No	Qty	Unit Price	Total
			2	9100	18200
	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling.				

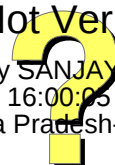
	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.				
	The 4 pair Unshielded Twisted Pair cable shall be ULØ Listed				
	All Category 6 cables shall meet or exceed the following characteristics:				
	Mechanical Characteristics				
	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.				
	Conductor Solid bare Copper				
	Conductor Diameter 0.56±0.005mm (23 AWG)				
	Insulation :High Density Polyethylene				
	Jacket FR PVC				
	Outer Diameter 6.1 mm nominal				
	Temperature Range -20° to +70°C				
7	Supply and Installation of Wall Mount 4 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		2	3500	7000
	Material - Mild Steel				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
8	Supply and Installation of Wall Mount 9 U Network Rack - Specification	Compliance Yes/ No	Qty	Unit Price	Total
	Product Type- Wall Mount		1	5320	5320
	Material - Mild Steel				
	Fan-Single				
	Size in MM-550X450				
	PUD, Cabel Manager and required accessories				
9	Supply and Installation of Network Router deice for Network Connectivity	Compliance Yes/ No	Qty	Unit Price	Total
	Architecture : MMIPS		1	66500	66500
	CPU : MT7621A				
	CPU core count : 2				
	CPU nominal frequency : 880 MHz				
	CPU Threads count : 4				
	Switch chip model : MT7621A				
	Dimensions : 113 x 89 x 28 mm				
	RouterOS license : 4				
	Operating System : RouterOS				
	Size of RAM : 256 MB				
	Storage size : 16 MB				
	Storage type : FLASH				
	MTBF : Approximately 100'000 hours at 25C				
	Tested ambient temperature : -40°C to 70°C				
	IPsec hardware acceleration : Yes				
	Powering :				
	Details :				
	Number of DC inputs : 2 (DC jack, PoE-IN)				
	DC jack input Voltage : 12-57 V				
	Max power consumption : 24 W				
	Max power consumption without attachments : 6 W				
	Cooling type : Passive				
	PoE in : 802.3af/at				

	PoE in input Voltage : 12-57 V				
	PoE-out :				
	Details :				
	PoE-out ports : Ether5				
	PoE out : Passive PoE up to 57V				
	Max out per port output (input 18-30 V) : 500 mA				
	Max out per port output (input 30-57 V) : 500 mA				
	Max total out (A) : 500 mA				
	Ethernet :				
	10/100/1000 Ethernet ports : 5				
	Fiber :				
	SFP ports : 1				
10	Supply and Installation of 2 KVA UPS- Specification	Compliance Yes/ No	Qty	Unit Price	Total
	UPS Capacity : 2kVA (Single Phase Input-Single Phase Output)		1	27000	27000
	Load Power Factor: 0.8				
	Bypass Parameters :Configurable				
	Separate Bypass :NA				
	Display :ICON LCD + LED Display				
	Temperature Compensated Charger : Available				
	Fan Speed Control : Yes				
	Controller: Digital Signal Processor				
	Input Characteristics				
	Phase / Voltage :1 Phase / 230V				
	Voltage :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 80 - 100% load :160V AC / 185V AC $\pm$ 5Vac				
	Low loss / Come back at 70 - 80 % load :140V AC / 155V AC $\pm$ 5Vac				
	Low loss / Come back at 60 - 70 % load : 120V AC / 135V AC $\pm$ 5Vac				
	Low loss/ Come back at 0 - 60 % load : 110V AC / 125V AC $\pm$ 5Vac				
	High loss/ Come back :300V AC / 290V AC $\pm$ 5Vac				
	Power Factor :0.99				
	THDi (RCD: IEC ref non Linear Load) : < 10%				
	VAH Required for 60Mins Backup : 10080VAH				
	Output Characteristics				
	Voltage :220VAC / 230VAC / 240VAC $\pm$ 1%				
	THDv :<3% Linear Load <5% Non Linear Load				
	Isolation Transformer :Should have inbuilt isolation transformer				
	DC / AC Efficiency (Inverter) @ rated load : upto 90%				
	Overload Capacity :105 - 110% : 3 min 111 - 130% : 30 sec				
	Operating Temperature : 0 - 40 deg C (with full Load) 40.1 to 50 deg - De-rated to 20%				
	RS 232 : Yes				
	USB Com Port : Yes				
	Intelligent Slot (SNMP / Dry Contacts / RS485 / MODBUS) : Yes, For Mini SNMP, Dry Contacts, MODBUS Cards				
	Ingress Protection : IP 20				
	EMC : EN 62040-2				

	Safety : EN 62040-1				
	Certification :CE Certified, BIS				
		Sub Total			₹ 409,720.00

Signature Not Verified

Digitally signed by SANJAY GUPTA
Date: 2023.09.19 16:00:03 IST
Location: Madhya Pradesh-MP



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Percentage BoQ

Tender Inviting Authority: C.E. MARKFED\

Name of Work - CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division (1st Call)

Contract No: MPSCMFL 1732

Name of the Bidder/ Bidding Firm / Company :					
<u>PRICE SCHEDULE</u> (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)					
NUMBER #	TEXT #	TEXT #	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Units	Estimated Rate in Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	5	6	53	55
1.01	CCTV Installation with IP Based DOME Camera within built Mic- Specification & IP Based Bullet Camera i/c required accessories at the Godowns of Markfed of Bhopal/Narmadapuram Division and Ujjain Division (1st Call)	Nos	45628972.00	45628972.00	INR Four Crore Fifty Six Lakh Twenty Eight Thousand Nine Hundred & Seventy Two Only
Total in Figures				45628972.00	INR Four Crore Fifty Six Lakh Twenty Eight Thousand Nine Hundred & Seventy Two Only
Quoted Rate in Figures		Select		0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only			