

Tender

For

CCTV Solution at AIIMS Campus

At

All India Institute of Medical Sciences, Jodhpur

NIT Issue Date	: 06 <sup>th</sup> November, 2017
NIT No.	: Admn/Tender/230/2017-AIIMS.JDH
Pre-Bid Meeting	: 17 <sup>th</sup> November, 2017 at 03:45 PM
Last Date of Submission	: 07 <sup>th</sup> December, 2017 at 03:00 PM
Bid opening	: 08 <sup>th</sup> December, 2017 at 03:15 P.M

Tender documents may be downloaded from institute's web site [www.aiimsjodhpur.edu.in](http://www.aiimsjodhpur.edu.in) (for reference only) and CPPP site <https://eprocure.gov.in/eprocure/app>



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All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan, an apex healthcare institute established by an Act of Parliament of India under aegis of Ministry of Health & Family Welfare, Government of India, invites **Online bids in two bid system** for tenders for supply & installation of the CCTV Solution at the institute. You are requested to quote your best offer along with the complete details of specifications, terms & conditions.

**Chapter-I**

<b>CCTV &amp; Surveillance BOM</b>					<b>EMD</b>	
<b>1</b>	<b>2</b>			<b>3</b>		<b>4</b>
<b>S No.</b>	<b>Particulars of the items</b>			<b>Qty</b>	<b>Unit</b>	
	<b>Equipment</b>	<b>S.No</b>	<b>Brief Description</b>			
1	Surveillance System	1	Dome Indoor Camera and Accessories	191	Nos.	
		2	Fixed Dome Camera and Accessories	54	Nos.	
		3	Fixed Outdoor Camera and Accessories	55	Nos.	
		4	Bullet Camera and Accessories	8	Nos.	
		5	PTZ Camera and Accessories	10	Nos.	
		6	Thermal Camera and Accessories	4	Nos.	
		7	Fixed Mini Dome Camera & Accessories	8	Nos.	
		8	Video Management System(VMS)	1	Nos.	
		9	Network Video Recorder	8	Nos.	
		10	Think Station	15	Nos.	
		11	Professional Display 43"	25	Nos.	
		12	Hard Disk Drive 8TB SV35	66	Nos.	
<b>Chapter-II</b>					<b>8,00,000</b>	
<b>Active &amp; Passive Components BOM</b>						
<b>1</b>	<b>2</b>			<b>3</b>		<b>4</b>
<b>S No.</b>	<b>Particulars of the items</b>			<b>Qty</b>		<b>Unit</b>
	<b>Equipment</b>	<b>Brief Description</b>				
1	Access Switches	24 Port PoE Swtich with 2 SFP Ports		12		Nos.
		12 Port PoE Swtich with 2 SFP Ports		61		Nos.
2	LX modules	1000BaseLX GBIC Modules		44		Nos.
3	Passive Copper Components (Cat-6)	Information Outlets		380		Nos.
		Single Face Plate/SMB		380		Nos.
		3 ft Workstation/Equipment Cords		380		Nos.
		7 ft Workstation/Equipment Cords		410		Nos.
		24 Port CAT6 Patch Panel		74	Nos.	
		CAT6 UTP Cable Box		66	Nos.	
4	Fiber Components	6 Core SMF		5500	Mtrs.	
		12 Port LIU Loaded		22	Nos.	
		SC-LC/SC FIBER PATCH CORD(3 m)		44	Nos.	

5	Networking Enclosures	12U Wall Mount Rack with Standard Accessories. The above racks must have all the standard accessories including wire manager, power distribution and hardware mounting ports.	56	Nos.
		12 U Weather proof outdoor racks	26	Nos
6	Services	Laying of CAT6 UTP Cable	19900	Mtrs.
		Laying of PVC Pipe/Casing Capping	6782	Mtrs.
		Fixing and Termination of IO's	380	Nos.
		Labeling, Installation & Termination of Jack Panel	74	Nos.
		Fixing, Installation of 12 U Rack With Proper Management of Cables	86	Nos.
		Laying of Fiber Cable with route markers	5500	Mtrs.
		Fixing & Installation of LIU	22	Nos.
		Fusion Splicing of Pigtails on Fiber Cables	278	Nos.
		Laying of HDPE Pipe	4508	Mtrs.
		Digging of Hard Soil	1733	Mtrs.
		Digging of Soft Soil	3000	Mtr.
		Fiber Link Testing With Power Meter and OTDR for dB Loss	1	LS
		Certification & Documentation Charges	1	LS
7	Accessories	HDPE Pipe 25mm	4508	Mtrs.
		PVC Channel/Conduit (suitable dia) with Accessories	4000	Mtrs.
		6 Mtr SS Pole	30	Nos
		PVC Casing Capping (suitable dia) with Accessories	2782	Mtrs.
<p><b>Note:-</b>There are around 70 Indoor DOME CCTV Cameras of make Divitel which are already install but not live as on date. The active and Passive BOM has been amended accordingly to incorporate these cameras within the overall CCTV and Surveillance network. Installation of these cameras are a part of the overall bid and System Integrator are requested to keep note of this scope. In case any camera turns out faulty the same needs to be informed to the project Engineer at AIIMS.</p>				

**Instructions:**

- Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>.**
- The complete bidding process in online. Bidders should be possession of valid digital Signature Certificate (DSC) of class II or III for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. For any assistance for e-bidding process, if required, bidder may contact to the helpdesk at 0291-2740741.
- Tenderer/Contractor/Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>'.**
- Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

**5. EMD Payment:**

The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 8,00,000/- (Rupees Eight Lakhs Only)** by way of demand drafts or Bank Guarantee or FDR only. The demand drafts or Bank Guarantee or FDR shall be drawn in favour of "**All India Institute of Medical Sciences, Jodhpur**". The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee/ Security Deposit and for unsuccessful bidder(s) it would be returned after award of the contract. **The demand drafts or Bank Guarantee or FDR for EMD must deliver to AIIMS, Jodhpur on or before last date of Bid Submission.**

- a) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
- b) The Firm who are registered with National Small Industries Corporation (NSIC) / MSME OR Small Scale Industries (SSI) are exempted to submit the EMD (Copy of registration must be provide along with technical bid)
- c) The EMD, in case of unsuccessful Bidders shall be retained by AIIMS, Jodhpur till the finalization of the tender. No interest will be payable by AIIMS, Jodhpur on the EMD.

**6. The Hard Copy of original instruments in respect of earnest money deposit etc. must be delivered to the AIIMS, Jodhpur on or before last date of Bid Submission as mentioned above. The bid without EMD will be summarily rejected.****7. Submission of Tender:**

The tender shall be submitted online in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

**The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.**

**i) Technical Bid**

The following documents are to be furnished by the Contractor along with **Technical Bid** as per the tender document:

- i) Signed and scanned copy of appropriate value of valid registration certificate (if any), experience certificate as per the tender notice, PAN, GST registration certificate and Tender Acceptance Letter.
- ii) Signed and Scanned copy of documents like Earnest Money Deposit.
- iii) Signed and Scanned Copy of Make and model of all systems, sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of Brochures and write-ups.

**Terms & Conditions:**

- 1. Validity:** The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.
- 2. "PRE –BID Meeting" with the intending bidders shall be held on 17<sup>th</sup> November, 2017 from 03:45 P.M. onwards at AIIMS, Jodhpur.** All the prospective bidders are requested to send comments/ representations on or before pre-bid meeting. Intending bidder will be allowed to seek clarification on specification, Conditions of Contract, etc. in writing to AIIMS, Jodhpur, within 48 hours after the pre-bid meeting.

3. In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

**4. Delivery and Installation:**

**i) For goods supplied from India:**

All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **180 days** from the date of issue of supply order.

**ii) For goods imported directly from abroad:**

All the goods ordered shall be delivered and Installed at AIIMS, Jodhpur within **180 days** from the date of opening of Letter of Credit for shipment.

All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of the supplier. If the supplier fails to deliver, install and commission the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week of the total order value shall be levied subject to maximum of 10% of the total order value. The successful tenderer will also provide required training for supplied items at AIIMS Jodhpur. The goods should be manufactured after adoption of latest technology.

If at any time during the currency of the contract, the supplier encounters conditions hindering timely of the goods and performance of services, the supplier shall promptly inform the AIIMS, Jodhpur for extension of the delivery schedule accordingly. On receiving the supplier's communication, the AIIMS, Jodhpur shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charges shall be levied as above on the total value of the concerned package of the purchase order. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

8. **Signing the Contract:** - The successful bidder shall be required to execute the Contract Agreement accepting all terms and conditions stipulated herein on a non-judicial stamp paper of Rs. 500/- (Rs. Five Hundred only) along with performance security within fifteen days of the issue of the Letter of notification of award. In the event of failure on the part of the successful bidder to sign the Contract within the period stipulated above, the EMD shall be forfeited and the acceptance of BID shall be considered as cancelled.
9. **Performance Security:** As a guarantee towards due performance and compliance of the contract work, the successful bidder (contractor) will deposit an amount equal to 10% of order value and should be kept valid for a period of 60 day beyond completion of all the contractual obligation, including CMC period towards security deposit by way of demand draft/ bank Guarantee in favour of "All India Institute of Medical Sciences, Jodhpur" drawn on any Nationalized Bank/Scheduled Bank and payable at Jodhpur within fifteen days of the issue of the Letter of notification of award along with non-judicial stamp paper of Rs. 500/- (Contract agreement).
10. **Incidental Services:** The supplier shall be required to perform the following services:-
- Installation & Commissioning, Supervision and Demonstration of the goods.
  - Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
  - On Site Training to Doctors/ Technicians/ Staff is to be provided by Supplier for operation and maintenance of the equipment for a period of 30 working days after successful installation of the machine, as per direction of user department.

- d. Supplying required number of operation & maintenance manual for the goods.
- e. To provide non-locked open software and standard interface inter-operability conditions for networked equipment's in hospital management information system, wherever applicable.

- 11. Accessories & Consumables:** The separate price list of all accessories and consumables, if any, must be attached/ enclosed along with the Financial Bid.
- 12. After Sales Service:** After sales service centre should be available on 24 (hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 24 hrs to ensure an uptime of minimum 95%, wherever applicable, failing which the necessary penalty measures shall be enforced.
- 13. Inspection:**
- a. AIIMS, Jodhpur shall have the right to inspect and/or to test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser.
  - b. AIIMS, Jodhpur right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by AIIMS, Jodhpur prior to the goods shipment.
  - c. The Director, AIIMS Jodhpur shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.
  - d. No payment shall be made for rejected Stores. Rejected items must be removed by the Bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.
- 14. Documents:**
- a. **All pages of the Tender should be numbered and indexed.**
  - b. The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully confirm to the goods and services specified by the purchaser in the tender documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the tender documents to establish technical responsiveness of the goods and services offered in its tender duly indicating relevant page numbers in the product literature.
  - c. The bidder shall provide a list of major Government and Private Institutions where its relevant bid item has been supplied during last one year.
- 15. Manufacturer Authorisation:** The bidder (if not original equipment manufacturer must submit Original Equipment Manufacturer authorization certificate that the tenderer is authorized for selling and maintain the equipment quoted for. Performa attached at **Annexure- III**.
- 16.** The bidders are required to submit user certificate for the relevant equipment on the letter head of the institution (Government/ Private).
- 17.** The successful bidder will be required to submit order copies of the supply of the equipment in Government institutions in last 12 month for rate reasonability purpose.
- 18. Insurance:** - The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to AIIMS, Jodhpur within specified period, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the AIIMS, Jodhpur.



**19. Tender Currencies:**

- a. The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees. Further, imported goods to be imported and supplied by the bidder are also required to be quoted in Indian Rupees.
- b. For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any, required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed /undertaken in India.
- c. Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

**20. Tender Prices:** While filling up the columns of the Financial Bid, the following aspects should be noted for compliance:**For domestic goods or goods of foreign origin located within India, the prices in the corresponding Financial Bid shall be entered separately in the following manner:**

- a. The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like GST, Custom Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.;
- b. Any GST or other taxes, which will be payable on the goods in India if the contract is awarded;
- c. Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid;
- d. The price of Incidental Services, as mentioned in List of Requirements and Financial Bid;
- e. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
- f. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

**For goods offered from abroad, the prices in the corresponding Financial Bid shall be entered separately in the following manner:**

- a. The price of goods quoted FOB port of shipment, as indicated in the List of Requirements and Financial Bid;
- b. The price of goods quoted CIF port of entry in India as indicated in the List of Requirements and Financial Bid;
- c. The price of goods quoted for delivery at AIIMS, Jodhpur as indicated in the List of Requirements, Financial Bid and Consignee List;
- d. Wherever applicable, the amount of custom duty with CDEC applicable on CIF value on the goods to be imported;
- e. The charges for Loading/Unloading, Inland transportation, Insurance and other local costs, Incidental cost to delivery of the goods from the port of entry in India to AIIMS, Jodhpur, as specified in the List of Requirements and Financial Bid;
- f. The charges for Incidental Services, as in the List of Requirements and Financial Bid;
- g. The prices of Turnkey ( if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
- h. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

**Additional information and instruction on Duties and Taxes:** If the Bidder desires to ask for GST, Customs Duty etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such GST and Customs duty etc. and no claim for the same will be entertained later.

**GST:**

- a. If reimbursement of GST is intended as extra over the quoted prices, the supplier must specifically state the same indicating the rate, quantum and nature of the GST applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of GST will be entertained after the opening of tenders.
- b. If a bidder chooses to quote a price inclusive of GST and also desires to be reimbursed for variation, if any, in the GST during the time of supply, the Bidder must clearly mention the same and also indicate the rate and quantum of GST included in its price. No claim on account of GST will be entertained after the opening of tenders.
- c. Subject to sub clauses (i) & (ii) above, any change in GST upward/downward as a result of any statutory variation in GST taking place within contract terms shall be allowed to the extent of actual quantum of GST paid by the supplier. In case of downward revision in GST, the actual quantum of reduction of GST shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

**Customs Duty:** In respect of imported goods offered from abroad, the bidder shall specify the rate as well as the total amount of customs duty payable with Custom Duty Exemption Certificate, if applicable, on the quoted goods in the Financial Bid. The bidder shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods.

- a. For transportation of imported goods offered from abroad, relevant instructions as incorporated shall be followed.
- b. For insurance of goods to be supplied, relevant instructions as provided shall be followed.
- c. Unless otherwise specifically indicated in this NIT document, the terms FCA, FOB, FAS, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris.
- d. The need for indication of all such price components by the bidders, as required in this clause is for the purpose of comparison of the tenders by the purchaser and will no way restrict the AIIMS, Jodhpur right to award the contract on the selected bidder on any of the terms offered.

**21. Indian Agent:-**If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, shall also furnish the following information:

- a. The complete name and address of the Indian Agent and its Permanent Account Number as allotted by the Indian Income Tax authority.
- b. The details of the services to be rendered by the agent for the subject requirement.
- c. Details of Service outlets in India, nearest to the AIIMS, Jodhpur to render services during Warranty and CMC period.

**22. Firm Price**

- a. Unless otherwise specified in the NIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- b. However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated will apply.

**23. Conversion of tender currencies to Indian Rupees: -** In case the bid document permits the bidders to quote their prices in different currencies, all such quoted prices of the responsive bidders will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the closing exchange rates established by the Reserve Bank of India for similar transactions, as on the date of '**Last Date of Submission of Tender**'.

**24. Payment Terms:****i) Payment for goods supplied from India:**

100% payment of the total order value shall be released after the successful installation/commissioning of the ordered goods against the submission of the inspection report.



**ii) Payment for Imported goods:**

For imported goods payment shall be made in the following manner:

- a) **On shipment:** 75 % payment of the contract price shall be paid 60 days after presentation of shipping documents {goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country} and upon the submission of the following documents:
- i. Four copies of Supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
  - ii. Original and four copies of the clean, on-board Bill of Lading/ Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill.
  - iii. Insurance Certificate;
  - iv. Certificate of origin by the chamber of commerce of the concerned country;
  - v. Certificate of country of origin;
  - vi. Manufacturer's / Supplier's warranty certificate;
  - vii. Manufacturer's own factory inspection report.
- b) **On Acceptance:** 25 % payment would be made after satisfactory installation & commissioning on issuance of Inspection certificate by the AIIMS, Jodhpur.

*Note:-The supplier shall not claim any interest or any other payment under the contract.*

**25. Custom Clearance:** For the Goods to be imported and supplied, the Institute will provide Custom Duty Exemption Certificate (CDEC) to successful bidder for availing concessional rate of duty as per prevailing Custom Tariff. In case, the bidder requires CDEC certificate, then the same should be specifically mentioned in the bid. The supplier is solely responsible for getting the material clearance from customs. Institute will provide all custom documents for custom clearance on the demand of supplier. Transportation of goods up to AIIMS, Jodhpur and its successful installation and commissioning is also the responsibility of the supplier. All charges/ expenses incurred in this process will be borne by the supplier. **NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYABLE BY THE INSTITUTE UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT/INSURANCE ETC.**

**26. Guarantee / Warrantee Period:** The Tenderers must quote for 05 years comprehensive warranty (Including all Spares, Accessories and Labour) from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected.

**Comprehensive Annual Maintenance Contract (CMC/AMC) Post Warranty**

- Complete system will be covered under post warranty Comprehensive Annual Maintenance Contract as per rates quoted in the price bid for a period of 5 years from the date of completion of warranty. The post warranty comprehensive AMC shall be a separate contract for 5 years period and shall be signed at beginning of the CMC period. The post warranty comprehensive AMC rates quoted in price bid for 5 years shall be included in the evaluation.
- During the post warranty comprehensive AMC period all software / services etc. as required to rectify any defect, will be provided by the successful bidder at no extra cost to AIIMS. Material / hardware /spares as required for such maintenance would also be provided by the bidder. No extra amount is payable by AIIMS for this post warranty AMC other than quoted AMC rates.
- **Comprehensive AMC comprises of the following services as a minimum**
  - a) Routine maintenance service: This is an on-site maintenance, which should be carried out four times in a year. Purpose of visit is to check system health and problem solving.
  - b) Breakdown maintenance service: In case of system breakdown, Vendor shall depute Engineers to restore the system at the earliest, within 24 Hours.

- c) Software support and technical services: Software additions / modifications, technical assistance to Purchaser's Engineers, technical discussions with Purchaser's Engineers /Technicians at vendor's facility etc. are included.
- d) Any Software/Hardware firmware upgrade should be included at no extra cost.
- e) The personnel deployed to site shall have thorough knowledge of the system and at least two years of experience in maintenance of similar system.

- Quarterly prorated payment of finalised AMC amount will be made after successful completion of each quarter of respective post warranty AMC
- AIIMS reserves the right to order for the post warranty AMC along with the main order or after the completion of the warranty period of one year, and such decision solely is at AIIMSs discretion. AIIMS reserves the right to sign the post warranty AMC for all 3 years or part of it or none.

#### **UPGRADES**

- Any upgrades to software/Hardware with respect to firmware and revisions during the period of contract, warranty and AMC should be provided by the successful bidder at no extra cost to AIIMS.

#### **TRAINING**

- The Successful Bidder will train AIIMS personnel at two levels
  - (a) Training for the worker's/security staff at locations level
  - (b) Training for AIIMS supervisory staff at locations / any other places as desired by AIIMS

**27. Uptime guarantee:**The firm should provide uptime guarantee of 98%

#### **28. Downtime penalty Clause**

- a. During the comprehensive warranty period, the guarantee uptime of 95% of 365 days will be ensured. In case the down time exceeds the 5% limit penalty of extension of guaranty period by two days for each additional day of down time will be enforced. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least FIVE YEARS after handling over the unit to the Institute. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the Institute if required.
- b. The principals or their authorized service providers are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.

**29. Arbitration:** If any difference arises concerning this agreement, its interpretation on payment to the made there-under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Secretary, Department of Legal Affairs. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1990 and the rule framed there under and in force shall be applicable to such proceedings.

**30. Subletting of Work:** The firm shall not assign or sublet the work/job or any part of it to any other person or party without having first obtained permission in writing of AIIMS, Jodhpur, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

- 31. Breach of Terms and Conditions:** In case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to cancel the work order/ job without assigning any reason thereof and nothing will be payable by AIIMS, Jodhpur in that event the security deposit shall also stands forfeited.
- 32. Insolvency etc:** In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified AIIMS, Jodhpur shall have the power to terminate the contract without any prior notice.
- 33. Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.
- Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.
- 34.** Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.
- 35.** The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.
- 36.** Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.
- 37.** After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer on cumulative basis. The bidder must quote for all the items otherwise bid will be treated as unresponsive.
- 38.** Conditional bid will be treated as unresponsive and it may be rejected.
- 39. Demonstration:** - AIIMS Jodhpur reserves the right to ask the tenderers for arranging demonstration of their equipment for which rates have been quoted, to the concerned committee, if required.
- 40.** The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).
- 41. Applicable Law:**
- The contract shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings / processing.
  - Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Jodhpur, Rajasthan, India only.
  - The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on both the parties.
  - Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

## **Bidder Prequalification Criteria**

In order to qualify for technical evaluation and further, bidder must meet the following minimum qualification criteria and submit relevant documents in support of following points:

1. The bidder should be registered in IT / ITeS related services business since last five years.
  2. The bidder should have a minimum annual turnover of Rs. 4 Crores from the IT and IT enabled Services during the last three financial years.
  3. The Bidder should have G.S.T & EPF registration certificates in India.
  4. The bidder should have following valid certificates for past two years:
    - a. ISO 27001 Certificate
    - b. ISO 9001 Certificate
  5. The bidder should have similar experience in any of the organizations in past three years ending 31<sup>st</sup> March 2017 as follows:
    - a. Minimum one order of value Rs 3.20 Crores in one year;  
**OR**
    - b. Minimum two orders of total value of Rs 2.40 Crores in one year;  
**OR**
    - c. Minimum three orders of total value of Rs 1.60 Crores in one year.
- "Similar" experience means the bidder must have experience of Supply, Installation, commissioning and maintenance of IT/ITeS Solution out of which deployed solution should be of (CCTV Surveillance with NVR/ Active & Passive Networking).
6. The bidder should have at least 10 technical resources on each category (CCTV & NVR/Switching & Networking) on its payroll as on date of bid submission.
  7. The bidder should not be blacklisted by Any Central or State Government, Public Sector Undertakings or any other Government controlled agency.

**Administrative Officer  
AIIMS, Jodhpur**

**Annexure-I****Chapter-I****S.No.1, Technical Specifications for Dome Indoor Camera and Accessories**

S.no	Item	Description
1	Image Sensor	Progressive scan RGB CMOS 1/3" or better
2	Operating Frequency	50 Hz
3	Day/ Night Operation	Yes with Built in IR Cut Filter
4	Minimum Illumination	Colour: 0.2 lux, F1.4, B/W: 0.0 with IR On
5	Mechanical Camera Adjustment	Three axis
6	IR Range	Optimized IR with 30 meter range, 850nm,
7	Lens	3-9 mm , Megapixel Lens with Varifocal zoom and focus
9	Electronic Shutter	(1/12 to 1/15000) or better
10	Image Resolution	1920x1080
11	Compression	H.264 in High, Main, Base profile, MJPEG
12	Frame Rate and Bit Rate	25/30 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate
13	GOV Length	It should be possible to vary the GOV length in the camera setting for better control on bandwidth
14	Audio Streaming	Full-duplex, 1 IN & 1 Out
15	Video Streams	Multiple ( Minimum 4 No's), individually configurable streams in H.264 @ 1920 x 1080 & 25 Fps and Motion JPEG with Controllable frame rate and bandwidth VBR/CBR H.264
16	Motion Detection	Yes built in with multiple configurable areas in the video stream
17	Image Configuration	The Camera shall be able to Include or Exclude any area of any size/ dimension within the scene in order to Eliminate False alarm and also optimize the bandwidth and storage
18	Pan Tilt Zoom	Digital PTZ
20	Electronic Exposure & Control	Automatic/ Manual
21	Wide Dynamic Range	80 dB or better
22	Backlight Compensation	Required
23	Analytics	Any object, Object in field, Line crossing
		Enter / leave field, Loitering
		Follow route, Idle / removed object
		Counting, Occupancy, Crowd density estimation, Condition change, Similarity search all these analytics should be included with the camera
24	Event Triggers	The camera shall be able to send and received trigger directly from any other camera without interface of VMS.
		Intelligent Video, Edge Storage Events, Software Alarms
25	Event Actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP
		PTZ function, Edge Storage/ NAS Storage, Pre & Post Alarm Recording, Actions configurable by web interface, IR Illuminator on

26	Edge Storage	Built in SD card slot with support up to 256 GB
27	Storage	The Cameras shall have the feature to directly record the videos/ images onto NAS without any Software
28	Protocols	IPv4/v6, HTTP , HTTPS, SSL/TLS, FTP , SMTP, UPnP, DNS, DynDNS, NTP, RTSP, RTP,TCP, UDP, IGMP, RTCP, ICMP, DHCP, SSH
29	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.
30	Security	Password protection, IP address filtering, HTTPS encryption,
		IEEE 802.1Xa network access control, Digest authentication, User
		access log, Centralized certificate management, TLS 1.2, SSL, DES, 3DES , IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked.
31	Firmware Upgrade	The firmware upgrade shall be done though web interface, The firmware shall be available free of cost
33	Interface	RJ 45, 100 Base TX
34	Enclosure	Impact Resistant, dust resistant, Polycarbonate
35	Power requirements	Vendor to Specify
36	Operating Temperature	-20 °C to 50 °C
37	Operating Humidity	20–90% RH (non-condensing)
38	Certification	UL, CE, FCC, IEC,EN, Onvif
39	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and applications in public domain
40	Mount	Wall/ Ceiling/ Surface
41	Warranty	5 Years OEM warranty
42	Approved Makes	PELCO, Bosch & Axis

### S.No.2, Technical Specifications for Fixed Dome Camera and Accessories

S. No.	Specifications	Parameters
1	Imager	1/4" Progressive scan RGB CMOS or better
2	Maximum Resolution	1920x1080
3	Video compression	Multiple, individually configurable 4 independent streams of H.264, 1280x 800 and 25fps
4	Shutter time	1/7000 s to 1/10 s
5	Networking	10/100 Mbps Ethernet with Cat -6 cable
6	Protocols	IPv4/v6, HTTP, HTTPS, SSL/TLS, FTP, CIFS/SMB,SMTP, , UPnP™,SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP,
		RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS
7	Lens	2.8mm IR Corrected, Megapixel Lens
9	Pan/Tilt/Zoom	Digital PTZ
10	Minimum illumination	Color: 0.2 lux, 0 lux with IR illumination on



11	IR Range	Minimum 30 m Inbuilt IR range
13	Intelligent video	Video motion detection, active tampering alarm, Any object, Object in field, Line crossing, Enter / leave field
		Loitering, Follow route, Counting
		Occupancy, Condition change, Similarity search, Flow / counter flow
14	Privacy Mask	Available
15	Backlight Compensation	Available
16	Power Supply	Vendor to Specify
17	Operating Temperature	-20 °C to 50 °C
		Humidity 20 - 95% RH (Non condensing)
18	Certifications	FCC,UL, CE and EN
19	Housing	Vandal Resistant, IP66 casing with aluminium base
20	Edge Storage	Minimum 256 GB Support
21	Digital PTZ	Yes
22	Guard Tour	Yes
23	Vandal Resistant	Yes, IK 10
24	Bandwidth Optimization	It should be possible to set the camera at Constant bit Rate ( CBR) within which the camera should work on VBR ( Variable Bit Rate)
25	Approved Makes	PELCO, Axis, Bosch

### S.No.3, Technical Specifications for Fixed Outdoor Camera and Accessories

S.No.	Camera Characteristics	Desired Parameters
1	Image sensor	1/3" Progressive Scan CMOS or better
2	Lens	Replaceable CS Mount: 3 to 10 mm, DC-Iris, Megapixel Lens
3	Field of View	As per lens
4	True Day and Night	Yes
5	Minimum Illumination / Light Sensitivity	Color: 0.08 lux F1.3
		B/W: 0.05 lux F1.3, IR 0 lux ON
6	IR Filter	Automatic Built in IR Cut filter
7	Shutter Speed	1/30 to 1/15000
8	Video Compression	H.265 and MJPEG
9	Resolutions and frame rates (H.265)	2600 (H) x 1980(V)
10	Video Streams	Minimum 4 @ H.265 30 fps
12	Analog video output	CVBS, 1 Vpp, BNC connector, 75 Ohm
13	Max Power	Vendor to Specify
14	Remote Focus support	Yes
15	Pan/Tilt/Zoom	Digital PTZ
16	Digital I/O ( Alarms)	DI x 1
		DO x 1
17	Local storage	SD Card Slot with 256 GB Support
18	Image Settings	Colour, Brightness, Sharpness, Contrast, White balance, Backlight compensation, Image Mirroring, Text and image overlay,
		Privacy mask, Rotation: 0°, 90°, 180°, 270°, Exposure control, Exposure zones, Fine tuning of

		behaviour at low light, Mirror Image
19	Supported Protocol	IPv4 & v6, HTTP, HTTPS, SSL/TLS, FTP, CIFS/SMB, SMTP, UPnP, SNMPv1/v2c/v3DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SSH
20	Security	IEEE 802.1x, IP Address Filter, Password Protection, Digest Authentication
21	ONVIF	Profile S, G, Q
23	Analytics	Any object, Object in field, Line crossing
		Enter / leave field, Loitering
		Follow route, Idle / removed object
		Counting, Occupancy, Crowd density estimation, Condition change, Similarity search
24	Operating Temp	- 20°C to 50°C
25	Privacy Mask	Required with Minimum 8 Zones
26	Image Configuration	The camera allows include/ exclude area in any shape in order to reduce false alarms and bandwidth/ storage
27	GOV Length	It is possible to vary the GOV length in the camera setting for better control on bandwidth
28	Backlight Compensation	On/ Off
29	Wide Dynamic Range (IEC 62676 Part 5)	Minimum 90 dB
30	Event Triggers	Motion Detection, Edge storage events, External Input, Time Scheduled, Camera Tampering, Software alarms.
		The camera shall be able to send and received trigger directly from any other camera without interface of VMS.
31	Event Actions	FTP or HTTP or network share, EMAIL, Notification via HTTP to other camera or device, Pre and post alarm video buffering, External Output Trigger, PTZ Pre-set, Guard Tour
32	Firmware Upgrade	The firmware upgrade shall be done though web interface, The firmware is available free of cost
33	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera
34	Encryption , Camera Firewall	TLS 1.2, SSL, DES, 3DES , IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked.
35	Housing	IP 66 Rated IK 08 rated for outdoor use
36	Certifications	CE, FCC, IEC, EN, UL
37	Environmental Ratings	IP66 or higher
38	Approved Makes	PELCO, Axis, Bosch.

#### S.No.4, Technical Specifications for Bullet Camera and Accessories

S.No.	Camera Characteristics	Desired Parameters
1	Image sensor	1/3" Progressive Scan CMOS or better
2	Lens	Replaceable CS Mount: 3 to 10 mm, DC-Iris,

		Megapixel Lens
3	Field of View	As per lens
4	True Day and Night	Yes
5	Minimum Illumination / Light Sensitivity	Color: 0.08 lux F1.3
		B/W: 0.05 lux F1.3, IR 0 lux ON
6	IR Filter	Automatic Built in IR Cut filter
7	Shutter Speed	1/30 to 1/15000
8	Video Compression	H.265 and MJPEG
9	Resolutions and frame rates (H.265)	2600 (H) x 1980(V)
10	Video Streams	Minimum 4 @ H.265 30 fps
12	Analog video output	CVBS, 1 Vpp, BNC connector, 75 Ohm
13	Max Power	Vendor to Specify
14	Remote Focus support	Yes
15	Pan/Tilt/Zoom	Digital PTZ
16	Digital I/O ( Alarms)	DI x 1
		DO x 1
17	Local storage	SD Card Slot with 256 GB Support
18	Image Settings	Colour, Brightness, Sharpness, Contrast, White balance, Backlight compensation, Image Mirroring, Text and image overlay,
		Privacy mask, Rotation: 0°, 90°, 180°, 270°, Exposure control, Exposure zones, Fine tuning of behaviour at low light, Mirror Image
19	Supported Protocol	IPv4 & v6, HTTP, HTTPS, SSL/TLS, FTP, CIFS/SMB, SMTP, UPnP, SNMPv1/v2c/v3DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SSH
20	Security	IEEE 802.1x, IP Address Filter, Password Protection, Digest Authentication
21	ONVIF	Profile S, G, Q
23	Analytics	Any object, Object in field, Line crossing
		Enter / leave field, Loitering
		Follow route, Idle / removed object
		Counting, Occupancy, Crowd density estimation, Condition change, Similarity search
24	Operating Temp	- 20°C to 50°C
25	Privacy Mask	Required with Minimum 8 Zones
26	Image Configuration	The camera allows include/ exclude area in any shape in order to reduce false alarms and bandwidth/ storage
27	GOV Length	It is possible to vary the GOV length in the camera setting for better control on bandwidth
28	Backlight Compensation	On/ Off
29	Wide Dynamic Range (IEC 62676 Part 5)	Minimum 90 dB
30	Event Triggers	Motion Detection, Edge storage events, External Input, Time Scheduled, Camera Tampering, Software alarms.
		The camera shall be able to send and received trigger directly from any other camera without

		interface of VMS.
31	Event Actions	FTP or HTTP or network share, EMAIL, Notification via HTTP to other camera or device, Pre and post alarm video buffering, External Output Trigger, PTZ Pre-set, Guard Tour
32	Firmware Upgrade	The firmware upgrade shall be done through web interface, The firmware is available free of cost
33	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera
34	Encryption , Camera Firewall	TLS 1.2, SSL, DES, 3DES , IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked.
35	Housing	IP 66 Rated IK 08 rated for outdoor use
36	IR Range	Minimum 30 m Inbuilt IR range
37	Certifications	CE, FCC, IEC, EN, UL
38	Environmental Ratings	IP66 or higher
<b>39</b>	<b>Approved Makes</b>	<b>PELCO, Axis, Bosch.</b>

#### S.No.5, Technical Specifications for PTZ Camera and Accessories

S.No.	Description	Required Parameters
1	Image Sensor	1/2.8" Progressive Scan CMOS or better
2	Operating Frequency	50 Hz
3	Day/ Night operation	Automatic with IR Cut Filter
4	Minimum Illumination	Colour: 0.02 Lux @ 30 IRE
		B/W": 0.004 @ 30 IRE or better
5	High-speed pan-tilt functionality	360° endless pan range and a 180° tilt range
6	Optical Zoom	30x Minimum & 12x Digital Zoom or better
7	Lens	4.3-129 mm or better
9	Pan, tilt and pre-set speed	Pan - 0.1° - 240°/s or better/Tilt: 0.1°/s - 120°/s or better
10	Image Resolution	1920 x 1080 or better
11	Compression	H.264, Motion JPEG
12	Frame Rate and Bit Rate	25 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate. In CBR Priority to be defined for Video quality or frame rate and the bandwidth upper limit shall not exceed the defined limit
13	GOP/ GOV	Ability to change the GOP/GOV Length to optimize the bandwidth and storage
14	Video Streams	Minimum 4 Streams in H.264, 1920 x 1080 resolution, 25 fps
15	Motion Detection	Yes built in with multiple configurable areas in the video stream
16	Electronic Shutter	1/25 sec to 1/15,000 sec or better
17	Electronic Exposure & Control	Automatic/ Manual
18	Wide Dynamic Range	80 dB or better
19	Backlight Compensation	Required
20	Image Freeze on PTZ	Required

21	Privacy Masks	Minimum 20 configurable 3D zones
22	Pre-set Positions	Minimum 256
23	Image Flip	Yes Automatic
24	Guard Tour	Minimum 2 No's
25	Built In Heater & FAN	Required
26	Temperature Control	Required
27	On-screen directional indicator	Required
28	Analytics	Any object, Object in field, Line crossing
		Enter / leave field, Loitering
		Follow route, Idle / removed object
		Counting, Occupancy, Crowd density estimation, Condition change, Similarity search all these analytics should be included with the camera
29	Event Actions	File upload via FTP, SFTP, HTTP and email
		Notification via email, HTTP and TCP
		Pre- and post-alarm video buffering, External output activation, PTZ pre-set, guard tour, Video recording to edge storage, card replenishment, Day/night mode, Overlay text
30	Pixel Counter	Built in – Required
31	Edge Storage	Built in SD card slot with support up to 256 GB with Class 10 speed
32	Protocols	least IP, HTTP, HTTPS, SSL/TLS, TCP, ICMP, RTSP, RTP, UDP, IGMP, RTCP, SMTP, FTP, DHCP, UPnP, ARP, DNS, DynDNS, SNTP, IPv4 & IPv6
33	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.
34	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1Xa network access control, Digest authentication, User access log, TLS 1.2, SSL, DES, 3DES , IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked
35	Firmware Upgrade	The firmware upgrade shall be done though web interface, The firmware shall be available free of cost
36	Interface	RJ 45, 100 Base TX
37	Enclosure	Aluminium, IP66 rated
38	Mount	Wall / Pole Mount
39	Power requirements	Power over Ethernet Plus (PoE+) IEEE 802.3at Type two Class 4, max. 20 W, Typical 9W; 20-28 V DC max. 24 W 20-24 V AC, max. 35 VA or as per camera OEM
40	Alarm	2 Configurable Input/ Output Ports
41	IR Range	Inbuilt with 180 Mtr Range
42	Operating Temperature	-20 °C to 50 °C
43	Operating Humidity	20–90% RH (Non condensing)
44	Certification	UL, CE, FCC, ONVIF, EN,

45	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and applications in public domain free of cost
46	Environmental Ratings	IP66 or higher
47	Warranty	5 Years OEM warranty
48	Approved Makes	PELCO, Axis, Bosch

**S.No.6, Technical Specifications for Thermal Camera and Accessories**

S.No	Specification	Parameters
1	Image Sensor	Un-cooled vanadium oxide micro bolometer 640(H) x 480(V) or better
2	FOV	15°H x 112°V
3	Sensitivity	NETD < 50 mK
4	Pixel Pitch	17µm OR BETTER
5	Detection Range: Human	380 Meters or better
6	Detection Range: Vehicle	1700 Meters or better
7	Video Compression	H.264,MJPEG
8	Resolutions	640 x 480
9	Frame rate	30 FPS
10	Video streaming	At least four H.264 and Motion JPEG streams using the same
		palette, simultaneous and individually configured in max.
		resolution at 30 fps with Controllable frame rate and bandwidth
		VBR/CBR H.264
11	Audio	Full Duplex
12	Image settings	Brightness, Exposure control, Image Rotation, Mirroring, Text and Image Overlay, Privacy mask, Corridor Format
13	Security	Password protection, IP address filtering, HTTPS encryption,
		IEEE 802.1X network access control, Digest authentication, User
		access log
14	Supported protocols	IPv4/v6, HTTP, HTTPSc, SSL/TLS, FTP,
		CIFS/SMB, SMTP,UPnP, SNMPv1/v2c/v3 (MIB-II),
		DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP,ARP, SOCKS, SSH
15	ONVIF	Yes
16	Intelligent Video	Any object, Object in field, Line crossing, Enter / leave field
		Loitering, Follow route, Counting
		Occupancy, Condition change, Similarity search, Flow / counter flow
17	Event Triggers	Motion Detection, Cross line Detection, Alarm Input, Time Scheduled, Edge Storage events, Temperature, Audio Detection, Video Analytics
18	Storage	The Cameras shall have the feature to directly record the videos/ images onto NAS without any Software



19	Power	Vendor to Specify
20	Connections	RJ-45, RS 485/RS422, 1 Alarm input and 1 Output
21	Edge Storage	Built in SD card slot with support up to 256 GB
22	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.
23	Firmware Upgrade	The firmware upgrade shall be done through web interface, The firmware shall be available free of cost
24	Encryption	TLS 1.2, SSL, DES, 3DES, IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked.
25	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera
26	Housing	IP66 rated Aluminium housing with built-in dehumidifying membrane
27	Operating Temperature	- 50 °C to 55 °C, Humidity 5-95% RH (non condensing)
28	Certifications	CE, FCC, C-tick, IEC, UL, NEMA TS2 vibration
29	Environmental Ratings	IP66 or higher
30	Approved Makes	PELCO, Axis, Bosch

#### S.No.7, Technical Specifications for Fixed Mini Dome Camera & Accessories

S.No	Specification	Parameters
1	Image Sensor	1/3.2" progressive scan RGB CMOS or better
2	Operating Frequency	50 Hz
4	Minimum Illumination	Colour: 0.3 Lux @ 30 IRE F2.0
		B/W": 0.1 @ 30 IRE F2.0
5	Lens	1.1 mm or better
6	Field of View	360° or better
7	Electronic Shutter	1/15000 s
8	Dynamic range	80 dB Wide Dynamic Range
9	Image Resolution	2592x1944 (5 MP) or better
10	Compression	H.264, MJPEG
11	Frame Rate and Bit Rate	12 FPS with Controllable Bit Rate/ Bandwidth and Frame Rate
12	GOV Length	It should be possible to vary the GOV length in the camera setting for better control on bandwidth
13	Pixel Counter	Built in
14	Video Streams	Multiple Streams (Minimum 4) in H.264 with configurable bit rate/ Bandwidth VBR/CBR
15	Motion Detection	Yes built in with multiple configurable areas in the video stream
16	Defog	Defog automatically adjusts
		parameters for best picture in foggy or misty scenes (switchable)
17	Pan/ Tilt/ Zoom	Digital PTZ of view areas, Pre-set positions,
		Guard tour. Digital PT of panorama, double panorama and quad views

18	Image settings	Compression, Colour, Brightness, Sharpness, Contrast, White balance, Exposure control, Backlight compensation, Wide Dynamic Range, Text and image overlay,
		Mirroring of images, Privacy mask, Exposure zones, Fine tuning of low light behaviour
19	Intelligent capabilities	Live Stream Accessed, Motion Detection, Day/Night Mode, Network, Camera Tampering, Edge Storage Disruption, 3rd Party Analytics, Manual Trigger, External Input, Built in pixel counter
20	Event Actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP
		PTZ function, Edge Storage/ NAS Storage, Pre & Post Alarm Recording, Actions configurable by web interface, PTZ pre-set, Guard Tour
21	Edge Storage	Built in SD card slot with support up to 256 GB
22	Storage	The Cameras shall have the feature to directly record the videos/ images onto NAS without any Software
23	Protocols	IPv4/v6, HTTP, HTTPS, SSL/TLS, FTP, SMTP, UPnP™, DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP,
24	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.
25	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1Xa network access control, Digest authentication, User
		access log, TLS 1.2, SSL, DES, 3DES, IP addresses which have never been successfully logged in and had more than 3 failed log-in attempts during the last 20 seconds are blocked.
26	Firmware Upgrade	The firmware upgrade shall be done through web interface, The firmware shall be available free of cost
27	Audio Streaming	Full-duplex / half duplex
28	Interface	RJ 45, 100 Base TX
29	Enclosure	IK10 Impact Resistant, dust resistant, Polycarbonate IP66
30	Hardware Alarm	1 Alarm Input and 1 Alarm Output
31	Power requirements	Vendor to Specify
32	Operating Temperature	-20 °C to 50 °C
33	Operating Humidity	0–95% RH (Non - condensing)
34	Certification	UL, CE, FCC, IEC, EN
35	Interoperability	ONVIF Profile S, ONVIF Profile G, ONVIF Q
36	Application Programmers Interface	The open interface shall be available for integration with 3rd party edge analytics and applications in public domain
37	Mount	Wall/ Ceiling/ Surface
38	Warranty	5 Years OEM warranty

39	Environmental Ratings	IP66 or Higher
40	ONVIF	Profile S
41	<b>Approved Makes</b>	<b>PELCO, Axis, Bosch</b>

**S.No.8, Technical Specifications for Video Management System(VMS)**

<b>Description / Parameters</b>	
VAS should be Open IP-Surveillance product, enabling simultaneous digital video recording from network.	
VAS OEM should give an undertaking that devices from reputed camera manufacturers can be used for video analytics.	
<b>Custom Video Analytics Features</b> – With flexible and open architecture, it should be possible to implement any custom video analytics feature as per requirement. The user authorization facility shall be available through the software which should also have Real-time Video Analysis features like:	
I.	Audible Siren
II.	Email
III.	SMS
VMS is primarily perceived as working on the concept of exception monitoring. Hence for any exception (event as pre-defined in the system like Tripwire etc.) occurring, following alerts are required :	
I.	Real time IVR as well as SMS alert at predefined mobile numbers.
II.	E-mail at predefined mail address.
The VMS system shall be open platform with integration with at least 70 IP camera leading brands in the world.	
The client OS platform should be able to run with Microsoft Windows and MAC platforms. (List of integrated brands to be submitted).	
The system shall be on Windows/ Linux platform.	
<input type="checkbox"/>	The OS shall be embedded in device without extra installation.
<input type="checkbox"/>	The system shall at least support 320 Mbps or above throughput for 8 bay models.
<input type="checkbox"/>	VAS should jointly and simultaneously be able to manage video analytics and video management as one product.
<input type="checkbox"/>	Simultaneous viewing and recording of live video from multiple cameras.
<input type="checkbox"/>	Several recording modes i.e. continuous, schedules, on alarm and on motion detection. Capacity to handle high frame rates and large amount of data.
<input type="checkbox"/>	Multiple search functions for recorded events.
<input type="checkbox"/>	Intelligent Search: Intuitive post-event motion search for suspicious areas on video and post-event 3rd party data keyword search then queries related camera recording. The system can also search events and double clicking query associated recording
<input type="checkbox"/>	Multi-View: Client PC can duplicate the same live view video onto multiple channels and digitally zoom in to see the details of different spots on cloned channels without losing the original live view video
<input type="checkbox"/>	Individual recycle condition (IRC) for each video. Users can assign retention days for each server based on the importance of the critical storage needs
<input type="checkbox"/>	User should be free to choose to filter the search based on the desired criteria.
<input type="checkbox"/>	The central Management Server should support unlimited cameras, 3rd party access control systems (System tested: 1024 channels of cameras, within 32 pcs of Recording Server), also it should support unlimited number of Video Walls and video displays, with up to 100 channel display per monitor. Easily drag and drop view and cameras to Video Wall.

<input type="checkbox"/>	The system shall support dual gigabit Ethernet ports.
	The system shall be able to synchronize time with NTP server (Internet Time Server). The system shall be able to centrally configure all devices and system settings on one interface.
<input type="checkbox"/>	VMS should provide the option to select Camera Name or Number, Camera Location, Alarm or event type, Recording Type (scheduled, event, operator, live video viewing, all), Duration, Operator name.
<input type="checkbox"/>	The user authorization facility shall be available through the software.
<input type="checkbox"/>	VMS should provide the facility for online storage as well as offline storage.( It will depend on AIIMS whether to use online Storage or not.) Also Status of all the components of digital VMS should be displayed.
<input type="checkbox"/>	VMS should support RAID, direct attached storage & NAS. The system shall support at 8 bay models, and each hard drive capacity shall be 6Tb. The system shall support RAID 0, 1, 5, 10.
<input type="checkbox"/>	The system shall support unified user interface for configuring, live view and playback.
	The system should support viewing live video of IP cameras through operating system including Microsoft and Mac and Microsoft Internet Explorer browser, or Mozilla Firefox or any other good browser.
<input type="checkbox"/>	The system should be able to extend to unlimited recording servers and metadata server.
<input type="checkbox"/>	The system should be able to support unlimited devices include camera and 3rd party devices.
<input type="checkbox"/>	The system should support unlimited channels of live viewing for video and metadata from 3rd party application.
	The system should be able to centrally distribute the activated licenses to cameras/3rd party devices from different recording servers and metadata servers.
<input type="checkbox"/>	The system should support at least 64 channels of camera license per recording server.
<input type="checkbox"/>	Image Fusion Technology should be there for manipulating camera views and changing its viewing angle and image size to allow for a seamless multi-pane panoramic view.
<input type="checkbox"/>	Up to 10 independent cameras can be set up as single view.
<input type="checkbox"/>	The system should support system status watchdog and automatically restart the system when abnormal event happened.
<input type="checkbox"/>	The system should be Server-Client Architecture and centralizes all video data transaction only via server to remote clients.
<input type="checkbox"/>	The system should be able to view event notification on e-map.
<input type="checkbox"/>	The system should be able to popup associated camera video from event list.
<input type="checkbox"/>	The system should support volume load balance, enabling user manually distributes cameras recording to different target volumes.
<input type="checkbox"/>	The system should support more features by upgrading, without re-install or re-configuring whole system. The system shall support video wall for big channels centralized display.
<input type="checkbox"/>	The playback system shall support up to 100 channel playback simultaneously on one monitor, up to 400 channel live view on single client PC and it should be able to playback from different servers.
<input type="checkbox"/>	The system should support digital PTZ on recorded video. The system shall support multiple E-maps layers. The system shall support various image formats for E-map: BMP, JPEG, GIF, PNG, and TIFF.
<input type="checkbox"/>	Auto-backup/export: The system shall be able to backup recorded video to a remote FTP server according to pre-defined schedule. Manual backup/export: The system shall enable user to back up the recorded video manually. The backup system shall calculate the required size of back up video.
<input type="checkbox"/>	The VMS software should be licensed.

□ Following IVS can be added on system as required : Advanced Video Analytics (Object Classification, Camera Shake Elimination, Presence (Tripwire), Enter and exit, Appear and disappear, Dwell (loitering), Tailgating, Stop, Direction), LPR & face recognition .

### S.No.9, Technical Specifications for Network Video Recorder

S.No.	Characteristics	Desired Parameters
1	Type	Rack-mount 2U & above
2	CPU Model	Intel Core i5 Processor or better
3	Max IP License(through upgrade)	64
4	Base IP License (included in server)	4
5	Server O/S	WINDOWS/ Embedded Linux
6	Video Compression	H.264, MPEG4, MJPEG
7	Ethernet (NIC)	2x Gigabits Ports
8	No of channels	64 cameras Recommended
9	Throughput	550Mbps
10	Number of Drives	8xSATA II
11	Max Storage Per Drive	6TB
12	Max internal storage	48TB
13	RAID Level	RAID 0,1, 5, 10
14	I/O Interface	2xUSB3.0, 2xUSB2.0, 1xeSATA (for DAS)
15	Voltage	100-240V and above
16	Humidity	5% ~ 95%
17	Temperature	0°C ~ 50°C
18	Power Consumption	400W and above
19	No. of Simultaneous Users	10 and above
20	Time Synchronization	Terminal (Slave), NTP (Server/Client)
21	Brand/Make	Genetic/Nuuo/Milestone

### S.No.10, Technical Specifications for Think Station

Description / Parameters
· Client Hardware - Industry standard Intel based platform, rack mountable, licensed Microsoft Operating system and requisite user licenses, licensed application suites.
· Intel Core i5 2600 @ 3.4 GHz or higher, min. 16 GB RAM DDR3, 1TB SATA II hard drive for OS and VMS applications, NVidia GTX 570 or DirectX VA 2.0 compatible card with 2 GB of RAM, 1600 x 1200 or higher screen resolution, 10/100/1000 Mbps Ethernet Network Interface Card, min. 16x DVD+/- RW Drive.
· Required Operating Systems: - <b>For Client PCs:</b> Microsoft Windows 7/8 Professional 32-bit/64-bit.
· Browser Requirements: Internet Explorer 9 or higher (for Web Clients), latest versions, Mozilla Firefox or Google Chrome.
· Desired better Quality 104keys based USB Keyboard & Tw-click and scroll down roller USB Optical Mouse.

· 24" LED TV / Resolution 1920 x 1080 / Connectivity: VGA/ HDMI-2, USB-1, HEAD PHONE-1 / Sound: Dolby digital / Digital Noise Filter / Clear Motion rate -100Hz /including wall mounting bracket & clamps / sufficient length of VGA and/or HDMI cable as per site requirement / Power cord / HDMI-VGA converter (if required) / Remote with battery/ Operating manual etc. Or Higher Specification.

### S.No.11, Technical Specifications for Professional Display 43"

Sno	Item	Description
1	General	Minimum 43"(43" DIAGONAL ) screen size, LED Professional Display Unit.
2	Native Display Resolution	1920*1080p(full HD) or more
3	Audio	In built Speakers 5w+ 5w (RMS) or more
4	Orientation	Landscape and portrait both
5	Input Connector	Minimum 1VGA 1 DVIx1,1HDMI,1USB,and audio video in
6	Output Connector	Audio Out
7	Other	RJ 45Connector
8	Contrast Ratio	1100:1 in case of IPS or better
9	Brightness	Min.350 cd/m(nit) or higher
10	Input Voltage	Ac100-240V 50/60 Hz
11	Surface treatment	Hard coating 3h,anti glare treatment
12	Remote Control	Wireless Remote Control
13		Two remote controls shall be supplied with each unit
14	Warranty	Five Year (onsite comprehensive)
15	Certification	CUL,FCC,CE,C-TICK
16	Wall Mount Kit	The wall mount should be cable of bearing the load of screen.
17	Approved Makes	Sony/LG/Panasonic

### S.No.12, Technical Specifications for Hard Disk Drive

8TB SV35

## Chapter-II

### Technical Specifications for Switches 24 Port with 4 SFP,

S. No	Detailed Technical Specifications	Brand
1	Enterprise class switch with Minimum 24 ports of 10/100/1000 base-T with POE and 4 additional SFP uplink ports	<b>Cisco/HP/ Extreme/Juniper</b>
2	1 U Rack mountable and should support stacking	
3	56 Gbps or higher Backplane capacity and minimum 40 Mpps of forwarding rate	
4	Switch should have min of POE/POE+ power budget of 400W.	
5	Should support Non-blocking and distributed forwarding hardware architecture	
6	All interfaces should provide wire speed forwarding for both Fiber and	



	copper modules
7	Memory: 512MB DRAM, 1GB Flash
8	Support for at least 1000 VLANs & 16k MAC address
9	It should have static IP routing and RIP from Day 1
10	It should have Address Resolution Protocol (ARP) entries: 2,000
11	Switch should have IPv4 unicast routes in hardware: 6000
12	Switch should support 8 hardware queues per port
13	Dynamic Host Configuration Protocol (DHCP) snooping
14	Switch Should Support OSPF
15	Switch Should Support Bidirectional forwarding detection
16	Switch should support LLDP and LLDP-MED capabilities
17	Should support IP source guard & DAI
18	Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).
19	Switch needs to have console port for administration & management
20	Management using CLI, GUI using Web interface should be supported
21	FTP/TFTP for upgrading the operating System
22	IEEE 802.1x support
23	IEEE 802.1D Spanning-Tree Protocol
24	IEEE 802.1p class-of-service (CoS) prioritization
25	IEEE 802.1Q VLAN
26	IEEE 802.3 10BASE-T specification
27	IEEE 802.3u 100BASE-TX specification
28	Switch should able to support management via CLI, Web interface
29	SNMP v1,v2,v3
30	Switch should be manageable through both IPv4 & IPv6.
31	Switch should be UL-UL60950-1, EN 55022 Class A, CE and ROHS
32	Should have modular OS and should support configuration roll back to recover mis-configured switch to last known good configuration
33	The switch should be EAL 3/NDPP certified under Common Criteria.
34	OEM should have atleast 8 spare depot in India.
35	Approved Makes

#### Technical Specifications for 12 Port Switch with 2 SFP Ports

S. No	Detailed Technical Specifications	Brand
1	Enterprise class switch with Minimum 12 ports of 10/100/1000 base-T with POE and 2 additional SFP uplink ports	<b>Cisco/HP/ Extreme/Juniper</b>
2	1 U Rack mountable and should support stacking	
3	28 Gbps or higher Backplane capacity and minimum 20 Mpps of forwarding rate	
4	Switch should have min of POE/POE+ power budget of 100W.	
5	Should support Non-blocking and distributed forwarding hardware architecture	
6	All interfaces should provide wire speed forwarding for both Fiber and copper modules	
7	Memory: 512MB DRAM, 1GB Flash	
8	Support for at least 1000 VLANs & 16k MAC address	

9	It should have static IP routing and RIP from Day 1
10	It should have Address Resolution Protocol (ARP) entries: 2,000
11	Switch should have IPv4 unicast routes in hardware: 6000
12	Switch should support 8 hardware queues per port
13	Dynamic Host Configuration Protocol (DHCP) snooping
14	Switch Should Support OSPF
15	Switch Should Support Bidirectional forwarding detection
16	Switch should support LLDP and LLDP-MED capabilities
17	Should support IP source guard & DAI
18	Should support Secure Shell (SSH) Protocol and Simple Network Management Protocol Version 3 (SNMPv3).
19	Switch needs to have console port for administration & management
20	Management using CLI, GUI using Web interface should be supported
21	FTP/TFTP for upgrading the operating System
22	IEEE 802.1x support
23	IEEE 802.1D Spanning-Tree Protocol
24	IEEE 802.1p class-of-service (CoS) prioritization
25	IEEE 802.1Q VLAN
26	IEEE 802.3 10BASE-T specification
27	IEEE 802.3u 100BASE-TX specification
28	Switch should able to support management via CLI, Web interface
29	SNMP v1,v2,v3
30	Switch should be manageable through both IPv4 & IPv6.
31	Switch should be UL-UL60950-1, EN 55022 Class A, CE and ROHS
32	Should have modular OS and should support configuration roll back to recover mis-configured switch to last known good configuration
33	The switch should be EAL 3/NDPP certified under Common Criteria.
34	OEM should have atleast 8 spare depot in India.
35	Approved Makes

### **Technical Specifications for Fiber Components**

S. No	Item	Decription
1	Fiber Components	1. 6 Core SMF- unitube armored with 2 rod as a central strength member.
		2. 6port LIU Loaded (WR CRS with coupler & pigtails)
		3. 24 Port LIU Loaded (WR CRS with coupler & pigtails)
		4. SC-LC/SC FIBER PATCH CORD(3 m)
2	Approved Makes	Molex/Panduit/ Siemon

### **Technical Specifications for Passive Copper Components**

S. No	Item	Decription
1	Passive Copper Components (Cat-6)	1. Information Outlets (Shutter Jack)
		2. Single Face Plate/SMB (86mm x 86mm)
		3. 3 ft Workstation/Equipment Cords
		4. 7 ft Workstation/Equipment Cords
		5. 24 Port CAT6 Patch Panel (loaded with shutter jack with rear cable manager)
		6. CAT6 UTP Cable Box FRPVC 23AWG.

2	Approved Makes	Molex/Panduit/ Siemon
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### Technical Specifications for Networking Enclosures

S. No	Item	Description
1	<b>General Requirements</b>	Rack should be designed to provide <b>Secure, Store, Streamline and Systemize IT Equipment's</b>
		Racks should be manufactured out of steel sheet punched, formed, welded and powder coated
		Rack should have 100% assured compatibility with all equipment's conforming to <b>DIN 41494</b> (General Industrial Standard for equipment's) or Equivalent <b>EIA /ISO / EN</b> Standard
		Rack should have 2 No Adjustable, 19" verticals with Punched 9mm Square Hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offering greater mounting flexibility and maximizes usable mounting space
		The Racks should be 550mm in width and 500 in depth for Network application
2	<b>Physical Specifications</b>	The Dimensions of the racks should be - HxWxD = 613x550x500
		Standard for Rack configuration should be welded frame integrated with side panel and vented top cover
		Usable Height should be 12U
3	<b>Equipment Access &amp; Installation</b>	The front door should open to allow easy access.
		Rack should have 1 Packet of mounting hardware, Pack of 20.
		All weight bearing components should be made from steel with a thickness not less than 1mm
		All sheet metal parts should be Pre-Treated and powder coated meeting ASTM Standard.
4	<b>Certifications, Environmental and Safety Requirements</b>	Racks should be manufactured by <b>ISO9001:2008, ISO14001:2004 &amp; OHSAS18001:2007</b> Certified company and should have proper EHS Policy
		Products must be <b>UL</b> Certified
		Manufacturer must certify that the products are <b>RoHS</b> Compliance
		Manufacturer must certify that the products are Comply DIN41494 and Equivalent EIA/ISO/EN /CEA Standard.
		The rack should comply minimum of IP 20 rating for protection against touch, ingress of foreign bodies and ingress of water.
		The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition
		Rack should have 1 no. Power Distribution Units with 6No 5A Indian Round Pin with PDU Rating 1.8KVA
		Rack should have 1 no. Horizontal Cable Organizer with plastic loops
		Rack should have provision for cable Entry and Exit from both top and bottom
		Rack should have 1 no. Cantilever Shelf for mounting NON-Rack Mountable Equipment's
		Rack should have Front Toughened Glass Door with lock and key
The unit should be shipped fully assembled as one orderable Unit		

		The manufacturer should offer an inside-delivery shipping option which includes reasonable delivery to the inside of the building and removal and disposal of shipping material and packaging.
5	<b>Warranty and Support</b>	The Products manufactured should provide warranty for 3 year from date of invoice, the warranty does not cover wrong Usage or miss-handling the products
		Electrical items such as Sockets, switches, fans etc. should have warranty for 3 year from date of installation
		For malfunction of any units/item in the rack, the support should be provided within the next business day
		Warranty claim has to be attended within 72 working hours
6	<b>Approved Makes</b>	<b>APC/Netrack/Panduit</b>

### Technical Specifications for Outdoor Weather Proof Racks

S. No	Item	Description
1	<b>General Requirements</b>	Rack should be designed to provide <b>Secure, Store, Streamline and Systemize IT Equipment's</b>
		Rack should have 100% assured compatibility with all equipment's conforming to <b>DIN 41494</b> (General Industrial Standard for equipment's) or Equivalent <b>EIA /ISO / EN</b> Standard
		The Rack should have 4 No Adjustable, 19" verticals with Punched 10mm Square Hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offering greater mounting flexibility, with numbered U positions
		The Rack should be 613mm in height, 600mm in width and 500mm in depth
2	<b>Physical Specifications</b>	Rack should support static load of 30 kgs (Uniformly distributed in U space)
		Rack should be associated with front metal door with Knob lock & key and should have provision to mount on Wall/Pole
		Rack should have PU Gasket associated with the door
		Rack should be fully welded frame with integrated side panel
3	<b>Equipment Access &amp; Installation</b>	The Rack should have 12U usable Space
		The Rack should have 2No's adjustable, 19" verticals with punched 10mm square hole and Universal 12.7mm-15.875mm-15.875mm alternating hole pattern offers greater mounting flexibility, with numbered U positions
		The OEM should include 20 No of Mounting hardware for equipment fixing.
		The front door should be easily detachable.
		The front door should open to allow easy access.
		Side panels should have integrated with the frame so that overall width of the unit does not change with the side panels installed
4	<b>Certifications, Environmental and Safety Requirements</b>	All weight bearing components should be made from CRCA with a thickness not less than 1.5 mm, 19" equipment mounting angle should be 1.5MM and other parts not less than 1.5mm
		All sheet metal parts should be Pre-Treated, primer Coated followed by powder coated meeting ASTM Standard and Out Door / IP55 Requirement

		Racks should be manufactured by <b>ISO9001:2008, ISO14001:2004 &amp; OHSAS18001:2007</b> Certified company and should have proper EHS Policy\
		Manufacturer must certify that the products are <b>RoHS</b> Compliance
		Manufacturer must certify that the products are Comply DIN41494 and Equivalent EIA/ISO/EN /CEA Standard.
		The rack should comply minimum of IP 55 rating for protection against touch, ingress of foreign bodies and ingress of water.
		The enclosure should both protect the user from mechanical hazards and generally meet the requirements for a mechanical enclosure (stability, mechanical strength, aperture sizes, etc.) as defined in IEC 60950 Third Edition.
		Provision to Fix Exhaust Fans on the bottom panel with Louvers.
<b>5</b>	<b>Type Of PDU</b>	Normal
<b>6</b>	<b>Phase</b>	1Phase
<b>7</b>	<b>Rating</b>	3.6 KVA
<b>8</b>	<b>Current</b>	16A
<b>9</b>	<b>Type Of Out Let</b>	Indian Round Pin
<b>10</b>	<b>No Of Out let</b>	6
<b>11</b>	<b>PDU Mounting</b>	Horizontal
<b>12</b>	<b>Space Requirement</b>	2
<b>13</b>	<b>Warranty and Support</b>	The Products manufactured should provide warranty for 3 year from date of invoice the warranty does not cover wrong Usage or miss-handling the products.
		Electrical items such as Sockets, switches, fans etc. should have warranty for 3 year from date of installation.
		For malfunction of any units/item in the rack, the support should be provided within the next business day.
		Warranty claim has to be attended within 72 working hours
<b>14</b>	<b>Approved Makes</b>	<b>APC/Netrack/Panduit</b>

### Chapter-III

<b>Technical Specifications for Power supply backup unit</b>						
	Power Rating		25kva & 6 kva	Qty Nos.	1	
<b>Input</b>	Voltage Range	v	400±20%			
	Frequency	Hz	50±5%			
	Input Power Factor		>0.9			
	Charger Topology		BUCK-IGBT			
	Electrical Connection			16 Sq. mm		
				(Neutral & Phase)		
			Earth 1.5 Sq. mm			
<b>Output</b>	Power Factor		0.8, unity lag load			
	Voltage	v	230			
	Voltage Regulation	%	±1			
	Frequency	Hz	50			
	Frequency Regulation	Hz	±0.05			
	Wave Form		Pure Sine Wave			
	Transient Response	%	<8(10%~90% (Linear Load)			

	Voltage Harmonic	%	<3 (Linear Load)
	Over Load Capacity		110% 10 min.
			111% to 150%: 1 min.
			>150% : 1 Sec
	Crest Factor		03:01
<b>Audible</b>	Battery Back-up Ending		Intermittent
<b>Warning</b>	Over load		Continuous
<b>Display</b>	LED		Inverter ON # Battery High # Charging ON # Battery Low # Over Load #
<b>Protection</b>			Output high voltage# Output low voltage# Overload# Short circuit# DC Short circuit# Battery over charging#
	LCD Meter (Without Touch Screen)		Input & Output Voltage. Frequency & Current # Battery Low # DC Voltage# Charging & Discharging Current #
	Touch Screen Color Display (Optional)		Input Output & Battery Parameter, On/Off & other Switches, Load Level & Battery Status Tripping Status.
<b>Interface</b>	Db9		RS232/USB Port, SNMP (Optional)
<b>Others</b>	Battery Start		Standard
	Cabinet Wheels		Standard
	Extended Battery Charging		Optional
	Sta2c By Pass		Optional/Default Rotary Switch
<b>Overall</b>	Efficiency (AC-AC)	%	>85(Full Load)
	Transfer Time	ms	0
	Temperature	°c	0~50
		%	5-95(Non-Condensed)
<b>Batteries</b>	<b>Dry Cell, Zero Maintenance Minimum 20 Batteries.</b>		



**Annexure-II****TECHNICAL BID**

Name of Firm/Contractor/Supplier	
Complete Address & Telephone No.	
Name of Proprietor/Partner/Managing Director/Director.	
PhoneNo:-  Mobile No:-  Email Id:-	
Name and address of service centre nearby Jodhpur.	
Whether the firm is a registered firm Yes/No (attached copy of certificate).	
PAN No. (enclose the attested copy of PAN Card).	
GSTIN (enclose the attested copy of GST Registration Certificate).	
Whether the firm has enclosed the Bank Draft/Pay Order/Banker's cheque of Earnest Money Deposit.	
Whether the Firm/Agency has signed each and every page of Tender/NIT.	
Any other information, if necessary.	

Authorized signatory of the bidder with seal.

**Annexure-III**

**MANUFACTURER’S / PRINCIPAL’S AUTHORIZATION FORM**

To

The Administrative Officer,  
All India Institute of Medical Sciences, Jodhpur

Sir,

TENDER: \_\_\_\_\_.

we, \_\_\_\_\_, who  
are established and reputable manufacturers of \_\_\_\_\_,  
having factories at \_\_\_\_\_

and \_\_\_\_\_, hereby authorize Messrs.

\_\_\_\_\_ (name and address of agents)

to bid, negotiate and conclude the contract with you against Tender

No. \_\_\_\_\_ for the above goods

manufactured by

us. No company or firm or individual other than Messrs. \_\_\_\_\_

are authorized to bid, negotiate and conclude the contract in regard to this business  
against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender  
for the goods offered for supply against this tender by the above firm.

The authorization is valid up to  
\_\_\_\_\_

Yours faithfully,

(Name)

For and on behalf of Messrs. \_\_\_\_\_  
(Name of manufacturers)/Principal.

**Annexure-IV**  
**Financial Bid**

**Chapter-I**

<b>CCTV &amp; Surveillance BOM</b>							
<b>1</b>	<b>2</b>			<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>S No.</b>	<b>Particulars of the items</b>			<b>Qty</b>	<b>Unit</b>	<b>Unit Rate inclusive of all taxes (In Rs.)</b>	<b>Total amount inclusive of all taxes (3*5)</b>
	<b>Equipment</b>	<b>S.No</b>	<b>Brief Description</b>				
1	Surveillance System	1	Dome Indoor Camera and Accessories	191	Nos.		
		2	Fixed Dome Camera and Accessories	54	Nos.		
		3	Fixed Outdoor Camera and Accessories	55	Nos.		
		4	Bullet Camera and Accessories	8	Nos.		
		5	PTZ Camera and Accessories	10	Nos.		
		6	Thermal Camera and Accessories	4	Nos.		
		7	Fixed Mini Dome Camera & Accessories	8	Nos.		
		8	Video Management System(VMS)	1	Nos.		
		9	Network Video Recorder	8	Nos.		
		10	Think Station	15	Nos.		
		11	Professional Display 43"	25	Nos.		
		12	Hard Disk Drive 8TB SV35	66	Nos.		
<b>Amount in Total for Chapter I in Rs.</b>							

**Chapter-II**

<b>Active &amp; Passive Components BOM</b>							
<b>1</b>	<b>2</b>			<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>S No.</b>	<b>Particulars of the items</b>			<b>Qty</b>	<b>Unit</b>	<b>Unit Rate inclusive of all taxes (In Rs.)</b>	<b>Total amount inclusive of all taxes (3*5)</b>
	<b>Equipment</b>	<b>Brief Description</b>					
1	Access Switches	1. 24 Port PoE Swtich with 2 SFP Ports		12	Nos.		
		2. 12 Port PoE Swtich with 2 SFP Ports		61	Nos.		
2	LX modules	1. 1000BaseLX GBIC Modules		44	Nos.		
3	Passive Copper Components (Cat-6)	1. Information Outlets		380	Nos.		
		2. Single Face Plate/SMB		380	Nos.		
		3. 3 ft		380	Nos.		

		Workstation/Equipment Cords				
		4. 7 ft Workstation/Equipment Cords	410	Nos.		
		5. 24 Port CAT6 Patch Panel	74	Nos		
		6. CAT6 UTP Cable Box	66	Nos.		
4	Fiber Components	1. 6 Core SMF	5500	Mtrs.		
		2. 6port LIU Loaded		Nos		
		3. 24 Port LIU Loaded		Nos		
		4. 12 Port LIU Loaded	22	Nos		
		4. SC-LC/SC FIBER PATCH CORD(3 m)	44	Nos		
5	Networking Enclosures	1. 12U Wall Mount Rack with Standard Accessories. The above racks must have all the standard accessories including wire manager, power distribution and hardware mounting ports.	56	Nos.		
		2. 12 U Weather proof outdoor racks	26	Nos		
6	Services	1. Laying of CAT6 UTP Cable	19900	Mtrs.		
		2. Laying of PVC Pipe/Casing Capping	6782	Mtrs.		
		3. Fixing and Termination of IO's	380	Nos.		
		4. Labeling, Installation & Termination of Jack Panel	74	Nos.		
		5. Fixing, Installation of 12 U Rack With Proper Management of Cables	86	Nos.		
		6. Laying of Fiber Cable with route markers	5500	Mtrs.		
		7. Fixing & Installation of LIU	22	Nos.		
		8. Fusion Splicing of Pigtails on Fiber Cables	278	Nos.		
		9. Laying of HDPE Pipe	4508	Mtrs.		
		10. Digging of Hard Soil	1733	Mtrs.		
		11. Digging of Soft Soil	3000	Mtr.		
		12. Fiber Link Testing With Power Meter and OTDR for dB Loss	1	LS		
		13. Certification & Documentation Charges	1	LS		
7	Accessories	1. HDPE Pipe 25mm	4508	Mtrs.		
		2. PVC Channel/Conduit (suitable dia) with Accessories	4000	Mtrs.		
		3. 6 Mtr SS Pole	30	Nos		
		4. PVC Casing Capping (suitable dia) with	2782	Mtrs.		

		Accessories				
Power supply backup unit						
<b>Amount in Total for Chapter II in Rs.</b>						
<b>Total amount (Chapter I + Chapter II) in figures in Rs.</b>						
<b>Total amount (Chapter I + Chapter II) in words in Rs.</b>						

**Note:**

1. L1 will be decided on cumulative basis i.e. total of Chapter I and Chapter II. The bidder must quote for all the items otherwise bid will be treated as unresponsive.
2. I/We have gone through the terms & conditions as stipulated in the tender and confirm to accept and abide the same.

Date:

Place:

Signature &amp; Seal of the Contractor

Full Name of the Contractor: