Notice Inviting Quotation

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI-110016

Dated:02/01/2018

Open Tender Notice No. –IITD/ADAC(SP-1446)/2018

Indian Institute of Technology Delhi is in the process of purchasing following item(s) as per details as given as under.

Details of the item	SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CCTV SYSTEMS IN LECTURE HALL COMPLEX AT IIT DELHI
Earnest Money Deposit to be submitted	Rs. 1,02,834/-
Warranty	3 Years
Performance security	5% of the tender value
Completion time	60 days

Tender Documents may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/epublish/app.Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/epublish/app .The portal enrolment is free of cost. This is an online tender process where bidders needs to submit physical bids at office of the indenter (Ref. Para 7 of Schedule, Next page).

Bidder can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website http://eprocure.gov.in/epublish/appas per the schedule given in the next page.

SCHEDULE

1.	EMD Amount	Rs. 1,02,834/- (Rupees One lakh, Two Thousand Eight Hundred Thirty Four only) [For EMD] (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, HauzKhas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the online quotation/bid. (Kindly refer to the UTR Column of
		the Declaration Sheet at Annexure-II)
2.	Issue of Tender Document	02/01/2018 (17:00 Hrs)
3.	Last date for receipt of queries	23/01/2018 (15:00 Hrs)
4.	Date of pre bid meeting	N.A
5.	Last Date and Time for receipts of Bids	23/01/2018 (15:00 Hrs)
6.	Opening of Technical Bid	24/01/2018 (15:00 Hrs)
7.	Place of Bid Submission & Opening of Bids	Office of Dean Academics Indian Institute of Technology,
		Hauz Khas, New Delhi - 110016
8.	Address of Communication	Office of the Dean Academics Indian Institute of Technology, Hauz Khas, New Delhi - 110016
9.	Contact Phone Numbers	(+91)-11- 26591326, 26597199
10.	Fax Number	(+91)-11- 26582037
11.	E-mail Address	prakash@physics.iitd.ac.in, rafatjamal@admin.iitd.ac.in

^{*}Tender document can also be downloaded (from 02/01/2018 to 23/01/2018) from IIT Delhi Website (www.iitd.ac.in/tenders/ eprocure.gov.in).

OFFICE OF THE DEAN ACADEMICS Indian Institute of Technology HauzKhas, New Delhi-110 016

NOTICE INVITING TENDERS

Dated: 02/01/2018

Subject: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CCTV SYSTEMS IN LECTURE HALL COMPLEX AT IIT DELHI

Invitation for Tender Offers

Indian Institute of Technology Delhi invites onlineBids (Technical bid and Commercial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer for **SUPPLY**, **INSTALLATION**, **TESTING AND COMMISSIONING OF CCTV SYSTEMS IN LECTURE HALL COMPLEX AT IIT DELHI** with (03 years) on site comprehensive warranty from the date of the Completion of the work in all respect and seven years comprehensive Annual Maintenance Contract as per terms & conditions specified in the tender document, which is available on CPP Portal http://eprocure.gov.in/epublish/app.

Technical Bid

A complete set of tender documents* may be Download by prospective bidder free of cost from the websitehttp://eprocure.gov.in/epublish/app. Bidder has to make payment of requisite fees (i.e. Tender fees (if any) and EMD) online through RTGS/NEFT only.

Terms & Conditions Details

Sl.No.	Specification
1.	Due date : The tender has to be submitted on-line before the due date. The offers received after the
	due date and time will not be considered.
2.	Preparation of Bids: The offer/bid should be submitted in two bid systems (i.e.) Technical bid and
	financial bid. The technical bid should consist of all technical details along with commercial terms and
	conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid.
3.	EMD: The Bidders should submit an EMD amount through RTGS/NEFT. The Technical Bid
	without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will
	be refunded without any interest to the unsuccessful bidders after the award of contract. Refer to
	Schedule (at page 1 of this document) for its actual place of submission.
4.	Refund of EMD : The EMD will be returned to unsuccessful Bidder only after the Tenders are
	finalized. In case of successful Bidder, it will be retained till the successful and complete
	installation of the equipment.
5.	Opening of the tender: The online bid will be opened by a committee duly constituted for this
	purpose. Onlinebids (complete in all respect) received along with UTR info of EMD fund transfer (if any) will be opened as mentioned at "Annexure: Schedule" in presence of bidders
	representative if available. Only one representative will be allowed to participate in the tender
	opening. Bid received without EMD will be rejected straight way. The technical bid will be
	opened online first and it will be examined by a technical committee (as per specification and
	requirement). The financial offer/bid will be opened only for the offer/bid which technically meets
	all requirements as per the specification, and will be opened subsequently for further
	evaluation. The bidders if interested may participate on the tender opening Date and Time. The
	bidder should produce authorization letter from their company to participate in the tender opening.
6.	Acceptance/ Rejection of bids: The Committee reserves the right to reject any or all offers
	without assigning any reason.
7.	Pre-qualification criteria:
	(i) Bidders should be the manufacturer / authorized dealer. Letter of Authorization from original
	equipment manufacturer (OEM) on the same and specific to the tender should be enclosed.
	(ii) An undertaking from the OEM is required stating that they would facilitate the bidder on a regular basis with technology/product updates and extend support for the warranty as well. (Ref.
	Annexure-III)
	(iii) OEM should be Nationally/Internationally reputed Company.
	(iv) Non-compliance of tender terms, non-submission of required documents, lack of clarity of the
	specifications, contradiction between bidder specification and supporting documents etc. may lead
	to rejection of the bid.
	(v) In the tender, either the Indian agent on behalf of the Principal/OEM or Principal/OEMitself
	can bid but both cannot bid simultaneously for the same item/product in the same tender.
	(vi) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid
8.	on behalf of another Principal/OEM in the same tender for the same item/product. Porformance Security: The Ridder shall require to submit the performance security in the form
0.	Performance Security : The Bidder shall require to submit the performance security in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is
	stated at page #1 of the tender document within 21 days from the date of receipt of the purchase
	order/LC and should be kept valid for a period of 60 days beyond the date of completion of
	warranty period.
9.	Force Majeure: The Bidder shall not be liable for forfeiture of its performance security, liquidated
	damages or termination for default, if and to the extent that, it's delay in performance or other
	failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this Clause, "Force Majeure" means an event beyond the control of the Bidder and not involving the Bidder's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the IITD either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Bidder shall promptly notify the IITD in writing of such conditions and the cause thereof. Unless otherwise directed by the IITD in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated 10. delivery schedule, the IITD has all the right to purchase the item/equipment from the other source on the total risk of the Bidder under risk purchase clause. Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, 11. the following: i. Item Nomenclature ii. Order/Contract No. iii. Country of Origin of Goods iv. Bidder's Name and Address v. Consignee details vi. Packing list reference number 12. **Delivery and Documents:** Delivery of the goods should be made within a maximum of 12 to 16 weeks from the date of the opening of LC. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company: 4 Copies of the Supplier invoice showing contract number, goods' description, quantity 2. unit price, total amount; 3. Insurance Certificate if applicable; 4. Manufacturer's/Supplier's warranty certificate; 5. Inspection Certificate issued by the nominated inspection agency, if any 6. Supplier's factory inspection report; and 7. Certificate of Origin (if possible by the beneficiary); 8. Two copies of the packing list identifying the contents of each package. 9. The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses. 13. **Delayed delivery:** If the delivery is not made within the due date for any reason, the Committee will have the right to impose penalty 1% per week and the maximum deduction is 10% of the contract value / price. 14. Prices: The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges. The offer/bid should be exclusive of taxes and duties, which will be paid by the IITD as applicable. However the percentage of taxes & duties shall be clearly indicated. The price should be quoted without custom duty and excise duty, since IIT Delhi is exempted from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary

In case of imports, the price should be quoted on FOB Basis only. Under special

certificate will be issued on demand.

circumstances (eg. perishable chemicals), when the item is imported on CIF/CIP, please indicate CIF/CIP charges separately upto IIT Delhi indicating the mode of shipment. IIT Delhi will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.

- Progress of Supply: Wherever applicable, Bidder shall regularly intimate progress of supply, in writing, to the IITD as under:
 - 1. Quantity offered for inspection and date;
 - 2. Quantity accepted/rejected by inspecting agency and date;
 - 3. Quantity dispatched/delivered to consignees and date;
 - 4. Quantity where incidental services have been satisfactorily completed with date;
 - 5. Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/IITD with date;
 - 6. Date of completion of entire Contract including incidental services, if any; and
 - 7. Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).
- 16. **Inspection and Tests:** Inspection and tests prior to shipment of Goods and at final acceptance are as follows:
 - After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the Bidder's plant by the Bidder, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The IITD shall be present at the Bidder's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The Bidder shall inform the IITD about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.
 - The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the IITD at its option after the equipment is installed at purchaser's site in the presence of Bidder's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Bidder shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.
 - In the event of the ordered item failing to pass the acceptance test, a period not exceeding one weeks will be given to rectify the defects and clear the acceptance test, failing which the IITD reserve the right to get the equipment replaced by the Bidder at no extra cost to the Purchaser.
 - Successful conduct and conclusion of the acceptance test for the installed goods and equipment shall also be the responsibility and at the cost of the Bidder.
- 17. **Resolution of Disputes**: The dispute resolution mechanism to be applied pursuant shall be as follows:
 - In case of Dispute or difference arising between the IITD and a domestic Bidder relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, Indian Institute of Technology (IIT) Delhi and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
 - In the case of a dispute between the IITD and a Foreign Bidder, the dispute shall be settled by

	arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the
	Bidder then the dispute shall be settled in accordance with provisions of UNCITRAL (United
	Nations Commission on International Trade Law) Arbitration Rules.
	• The venue of the arbitration shall be the place from where the order is issued.
18.	Applicable Law: The place of jurisdiction would be New Delhi (Delhi) INDIA.
19.	Right to Use Defective Goods
	If after delivery, acceptance and installation and within the guarantee and warranty period, the
	operation or use of the goods proves to be unsatisfactory, the IITD shall have the right to continue to
	operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or
20	complete replacement is made without interfering with the Purchaser's operation.
20.	Bidder Integrity
	The Bidder is responsible for and obliged to conduct all contracted activities in accordance with the
	Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.
21.	Training
21.	The Bidder is required to provide training to the designated Purchaser's technical and end user
	personnel to enable them to effectively operate the total equipment.
22.	Installation & Demonstration
22.	The Bidder is required to do the installation and demonstration of the equipment within One month
	of the arrival of materials at the IITD site of installation, otherwise the penalty clause will be the
	same as per the supply of materials.
	In case of any miss happening/damage to equipment and supplies during the carriage of supplies
	from the origin of equipment to the installation site, the Bidder has to replace it with new
	equipment/supplies immediately at his own risk. Bidder will settle his claim with the insurance
	company as per his convenience. IITD will not be liable to any type of losses in any form.
23.	Insurance: For delivery of goods at the purchaser's premises, the insurance shall be obtained by the
	Bidder in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final
	destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for
	a period of not less than 3 months after installation and commissioning. In case of orders placed on
	FOB/FCA basis, the IITD shall arrange Insurance. If orders placed on CIF/CIP basis, the
24	insurance should be up to IIT Delhi.
24.	Incidental services: The incidental services also include:
	• Furnishing of 01 set of detailed operations & maintenance manual.
	• Arranging the shifting/moving of the item to their location of final installation within IITD
	premises at the cost of Bidder through their Indian representatives.
25.	Warranty& AMC:
	Warrantee:
	(i) Warranty period shall be (as stated at page #1 of this tender) from date of installation of Goods at
	the IITD site of installation. The Bidder shall, in addition, comply with the performance and/or
	consumption guarantees specified under the contract. If for reasons attributable to the Bidder,
	these guarantees are not attained in whole or in part, the Bidder shall at its discretion make
	such changes, modifications, and/or additions to the Goods or any part thereof as may be
	necessary in order to attain the contractual guarantees specified in the Contract at its own cost
	and expense and to carry out further performance tests. The warranty should be comprehensive on site.
	(ii) The IITD shall promptly notify the Bidder in writing of any claims arising under this warranty.
	(n) The HTD shall promptly notify the bidder in writing of any claims arising under this warranty.

- Upon receipt of such notice, the Bidder shall immediately within 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Bidder shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the IITD for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the Bidder having been notified fails to remedy the defects within 02 days, the IITD may proceed to take such remedial action as may be necessary, at the Bidder's risk and expenses and without prejudice to any other rights, which the IITD may have against the Bidder under the contract.
- (iii) The warranty period should be clearly mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.
- (iv) After the warranty period is over, Annual Maintenance Contract (AMC)/Comprehensive Maintenance Contract (CMC) up to next seven years shall be started. The AMC/CMC charges quoted in BOQ will not be included in computing the total cost of the equipment. However, the L-1 criteria will be decided on the basis of total cost quoted in the BOQ including AMC charges.

Annual Maintenance Contract (AMC):

- (i)The Bidder shall enter into an Annual Maintenance Contract (AMC) for the comprehensive maintenance of the CCTV Cameras and other equipment as per scope of this tender, after expiry of three year on site warranty. The comprehensive maintenance shall be drawn for a period of 07 (Seven) years from the date of expiry of the warranty.(ii) The cost of comprehensive AMC shall be inclusive of the cost of repair/ replacement of all the items of hardware & software, UPS etc. supplied under the main contract/tender of the CCTV Cameras.
- (iii)The payment in respect of AMC shall be made in quarterly installments after rendering of service/ maintenance as per scope of the contract.
- (iv) In the event of failure to provide satisfactory maintenance support, the IITD shall be at liberty to forfeit a minimum 3 months payment from AMC charges. The decision of the IITD in this regard shall be final & binding on the Bidder.
 - if the dissatisfaction in maintenance support continues beyond two consecutive quarters, the IITD shall proceed against the Bidder for forfeiture of the security deposit and be at liberty to appoint another agency for Annual Maintenance Contract.
- (V) The Bidder shall provide complete technical support on (24x7) basis throughout the year for the CCTV Cameras and other equipments on call basis by sending highly skilled technical persons, to look after the overall maintenance related to software and hardware.
- (VI) Annual Maintenance Contract for operation of CCTV Cameras will be effective for 10 years including 03 year warrantee period. The Bidder shall offer the following services on call basis to the Institute.

	Sr. No.	Descriptions	Maintenance Time Schedule	
	1	Maintenance of LAN wiring	8 hours- all days	
		from switch to cameras		
	2.	Replacement of faulty Cameras,	24x7 - all days	
		Switches, Monitor, CPU, UPS		
		etc.		
26.		e written in English language. I	English language version of the Contr	
		<u>*</u>	er documents pertaining to the Contra	ct, which
		parties, shall be written in the sa	me language.	
27.	Applicable Law			
	The Contract shall be	e interpreted in accordance with	the laws of the Union of India and all	disputes
	shall be subject to pla	ce of jurisdiction.		
28.	Notices			
			rsuant to this contract/order shall be so	
	other party in	writing or by cable, telex, FAX	or e mail and confirmed in writing to	the other
	party's addres	S.		
	A notice shall	be effective when delivered of	r on the notice's effective date, which	chever is
	later.			
29.	Taxes			
	Bidders shall be ent	irely responsible for all taxes,	duties, license fees, octroi, road pern	nits, etc.,
	incurred until delivery of the contracted Goods to the Purchaser. However, GST in respect of the			
	transaction between the IITD and the Bidder shall be payable extra, if so stipulated in the order.			
30.	Duties			
	IIT Delhi is exempte	ed from paying custom duty und	der notification No.51/96 (partially or	rfull) and
	necessary "Custom	Duty Exemption Certificate"	can be issued after providing f	following
			will be issued to the shipment in the	name of
	the Institute, no certif	icate will be issued to third party	<i>7</i> :	
	a) Shipping details i.e	e. Master Airway Bill No. and H	ouse Airway No. (if exists)	
	b) Forwarder details	i.e. Name, Contact No., etc.		
	_		I necessary Excise Duty ExemptionC	'ertificate
	1	which following information are	1	
	, -		Amount on which ED is applicable	
	c) Supply Order Cop			
	d) Performa-Invoice	Copy.		
31.	Payment:			
	_		made by the IITD against delivery, in	-
			eptance of the equipment at IITD	_
			e IITD and on production of unco	onditional
	_	=	e 8 of tender terms and conditions.	
	<u> </u>	· · · · · · · · · · · · · · · · · · ·	gh irrevocable Letter of Credit (LC).	
			of foreign Bidder after the submi	
	-	-	will be established on the exchange	
			ports, LC will be opened for 100%	
			on presentation of complete and clear	11 0
	documents and 20	0% of the LC amount shall be re	eleased after the installation and demo	onstration

of the equipment at the INST site of installation in faultless working condition for period of 60 days from the date of the satisfactory installation and subject to the production of unconditional performance bank guarantee as specified in Clause 8 of tender terms and conditions. iii. Indian Agency commission (IAC), if any shall be paid after satisfactory installation & commissioning of the goods at the destination at the exchange rate prevailing on the date of negotiation of LC documents, subject to DGS&D registration for restricted items. iv. All the bank charges within India will be borne by the Institute and outside India will be borne by the Bidder. User list: Brochure detailing technical specifications and performance, list of industrial and 32. educational establishments where the items enquired have been supplied must be provided. (Ref. Annexure-IV) 33. **Manuals and Drawings** Before the goods and equipment are taken over by the Purchaser, the Bidder shall supply operation and maintenance manuals. These shall be in such details as will enable the IITD to operate, maintain, adjust and repair all parts of the works as stated in the specifications. The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract. (iii) Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser. 36. **Application Specialist**: The Bidder should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office. (Ref. to Annexure-III) 37. **Site Preparation**: The Bidder shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The Bidder must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The Bidder shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other preinstallation requirements. 38. **Spare Parts** The Bidder may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Bidder: ii. Such spare parts as the IITD may elect to purchase from the Bidder, providing that this election shall not relieve the Bidder of any warranty obligations under the Contract; and iii. In the event of termination of production of the spare parts: iv. Advance notification to the IITD of the pending termination, in sufficient time to permit the IITD to procure needed requirements; and v. Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested. Bidder shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order. 39. **Defective Equipment**: If any of the equipment supplied by the Bidder substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Bidder with 18% interest if such payments for

	such equipment have already been made. All damaged or unapproved goods shall be returned at Bidders cost and risk and the incidental expenses incurred thereon shall be recovered from the Bidder. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of Bidder including all other charges. In case Bidder fails to replace above item as per above terms & conditions, IIT Delhi may consider "Banning" the Bidder.
40.	Termination for Default
	The IITD may, without prejudice to any other remedy for breach of contract, by written notice of
	default sent to the Bidder, terminate the Contract in whole or part:
	i. If the Bidder fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser; or
	ii If the Bidder fails to perform any other obligation(s) under the Contract.
	iii If the Bidder, in the judgment of the IITD has engaged in corrupt or fraudulent practices in
	competing for or in executing the Contract.
	For the purpose of this Clause:
	i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of
	value to influence the action of a public official in the procurement process or in
	contract execution.
	ii. " Fraudulent practice " means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower,
	and includes collusive practice among Bidders (prior to or after bid submission)
	designed to establish bid prices at artificial non-competitive levels and to deprive the
	Borrower of the benefits of free and open competition;"
	• In the event the IITD terminates the Contract in whole or in part, the IITD may procure, upon
	such terms and in such manner, as it deems appropriate, Goods or Services similar to those
	undelivered, and the Bidder shall be liable to the IITD for any excess costs for such similar
	Goods or Services. However, the Bidder shall continue the performance of the Contract to the
41.	extent not terminated. Downtime: During the warranty period not more than 5% downtime will be permissible. For
41.	every day exceeding permissible downtime, penalty of 1/365 of the 5% FOB value will be
	imposed. Downtime will be counted from the date and time of the filing of complaint with in the
	business hours.
43.	Training of Personnel: The Bidder shall be required to undertake to provide the technical
	training to the personnel involved in the use of the equipment at the Institute premises,
	immediately after completing the installation of the equipment for a minimum period of one week at the Bidder's cost.
44.	Disputes and Jurisdiction : Any legal disputes arising out of any breach of contract pertaining to
	this tender shall be settled in the court of competent jurisdiction located within New Delhi.
45.	Compliancy certificate: This certificate must be provided indicating conformity to the technical
	specifications. (Annexure-I)
46.	"In case of CIF/CIP shipments, kindly provide the shipment information atleast2 days in advance
	before landing the shipment along with the documents i.e. invoice, packing list, forwarder Name,
	address, contact No. in India to save demurrage charges (imposed by Indian Customs). Otherwise these charges will be recovered from the Ridder/Indian Agent."
	Otherwise these charges will be recovered from the Bidder/Indian Agent."

COMPLIANCE SHEET

TECHNICAL SPECIFICATION

Qualification Criteria for CCTV Camera, NVR etc.

Duly filled in and got signed

Product Line Description	2MP IP IR Dome Camera	Compliance (Only Yes or No)
2MP IP IR Dome Camera		
IMAGE SENSOR	1/3" 2 megapixel progressive scan CMOS	
EFFECTIVE PIXELS	1920 (H) × 1080 (V)	
ELECTRONIC SHUTTER SPEED	Auto/Manual, 1–1/100000 s	
MIN. ILLUMINATION	0.1 lux, F2.1 (Colour); 0 lux (IR LEDs on)	
IR DISTANCE	Up to 30 m	
DAY/NIGHT	Auto (ICR)/Colour/BW	
BACKLIGHT COMPENSATION	Back Light Compensation/DWDR & Highlight Compensation	
AUTO WHITE BALANCE	Required	
AUTOGAIN CONTROL	Required	
NOISE REDUCTION	3D	
PRIVACY MASKING	Up to 4 areas	
FOCAL LENGTH	2.8 mm	
MAX. APERTURE	F2.1	
FOCUS CONTROL	Fixed focus	
HORIZONTAL ANGLE OF VIEW	Minimum 92°	
LENS TYPE	Fixed	
COMPRESSION	H.264 (Main/High/Baseline Profile) /MJPEG	
RESOLUTION	1080p (1920×1080), 720p (1280×720), D1 (704×576/704×480), CIF (352×288/352×240)	
FRAME RATE	1080p (1–25/30 fps),	

	D1, CIF (1–25/30 fps)	
COMPRESSION	H.264: 4–8192 kbps	
CORRIDOR MODE	Required	
ETHERNET	RJ-45 (10/100Base-T)	
PROTOCOL	IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP,	
INGIGGE	UPnP, ICMP, IGMP, RTSP, RTP, SMTP, NTP,	
	DHCP, DNS, PPPoE, DDNS, FTP, IP Filter,	
	QoS, 802.1X.	
COMPATIBILITY	ONVIF Profile S	
MAX. USER	20 users	
ACCESS		
POWER SUPPLY	PoE (802.3af), 12 V DC	
POWER	4.7 W max. (with IR LEDs on)	
CONSUMPTION		
WORKING	-30°C to 60°C; 10% to 100%, RH condensing	
ENVIRONMENT		
INGRESS	IP66	
PROTECTION		
VANDAL	IK10	
RESISTANCE		
Certification	CE ECC III	
Required	CE, FCC, UL	
Approved Makes	Axis, Honeywell &Pelco	
Product Line	2MP IP Fixed Type Box/ Bullet Camera	Complianc
Description	with IR Illuminator	e (Only Yes
		or No)
		,
		·
	d Type Box/ Bullet Camera with IR Illuminato	·
PoE	Required	·
PoE Audio	Required 1 in/1out	·
PoE Audio 12VDC / 24VAC	Required 1 in/1out Required	·
PoE Audio 12VDC / 24VAC Housing	Required 1 in/1out	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection	Required 1 in/1out Required Internal or External	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating	Required 1 in/1out Required Internal or External IP 66	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating	Required 1 in/lout Required Internal or External IP 66 IK10	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External 30m	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan 2MP – 1920 x 1080	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution ONVIF	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution ONVIF Minimum	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan 2MP – 1920 x 1080 Profile S	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution ONVIF Minimum Illumination	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan 2MP – 1920 x 1080 Profile S Color: 0.045Lux @f/2.1	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution ONVIF Minimum Illumination (May vary	Required 1 in/1out Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan 2MP – 1920 x 1080 Profile S	·
PoE Audio 12VDC / 24VAC Housing Ingress Protection rating Vandal Proof Rating IR Illuminator IR Range Imaging Device Imager Type Imager Readout Maximum Resolution ONVIF Minimum Illumination	Required 1 in/lout Required Internal or External IP 66 IK10 Internal or External 30m 1/3" 2Megapixel progressive scan CMOS CMOS Progressive scan 2MP – 1920 x 1080 Profile S Color: 0.045Lux @f/2.1	·

Day/Night Method	Mechanical ICR (ON / OFF / AUTO selectable)	
Signal-to-Noise	50 db minimum	
Ratio	30 do minimum	
Auto Iris Lens Type	DC IRIS	
Electronic Shutter	A (M	
Range	Auto/Manual, 1/3(4)~1/10000s	
Auto White Balance	Required	
DWDR	Required	
Back light	DLC (III C (aslastalla)	
compensation	BLC / HLC (selectable)	
Wide Dynamic	DWDD	
Range	DWDR	
Digital Noise	3D Dig Noise Reduction (ON / OFF	
Reduction	selectable)/2D	
Amalartica	Motion Detection/Scene change (covering,	
Analytics	defocusing)/Face detect	
Privacy Zone	4 configurable windows	
Motion Detection	Off/ On / By Schedule	
Character Overlay	Required	
	Compression,3D digital noise reduction	
	(ON/OFF) color, brightness, sharpness, contrast,	
Image Cattings	white balance,	
Image Settings	exposure control, exposure zones, backlight	
	compensation	
Network	RJ-45 (10/100Base-T)	
Tietivoni		
Power Input	PoE, 12VDC	
	PoE, 12VDC Max 9W (with IR on, motorized lens working)	
Power Input	,	
Power Input Power Consumption	Max 9W (with IR on, motorized lens working)	
Power Input Power Consumption	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m	
Power Input Power Consumption Local Storage	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB	
Power Input Power Consumption Local Storage IR Illuminator	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens	
Power Input Power Consumption Local Storage IR Illuminator Lens	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480) CIF(352x 288/352x 240)	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams Frame Rate	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480) CIF(352x 288/352x 240) TCP/IP, UDP, ICMP, IPv4, IPv6, QoS, HTTP,	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams Frame Rate	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280× 960) 720P(1280× 720) D1(704× 576/704× 480) CIF(352× 288/352× 240) TCP/IP, UDP, ICMP, IPv4, IPv6, QoS, HTTP, HTTPS, SMTP, FTP, RTSP, UPnP, DNS,	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams Frame Rate Supported Protocols Unicast	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480) CIF(352x 288/352x 240) TCP/IP, UDP, ICMP, IPv4, IPv6, QoS, HTTP, HTTPS, SMTP, FTP, RTSP, UPnP, DNS, NTP, RTP 20users	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams Frame Rate Supported Protocols	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480) CIF(352x 288/352x 240) TCP/IP, UDP, ICMP, IPv4, IPv6, QoS, HTTP, HTTPS, SMTP, FTP, RTSP, UPnP, DNS, NTP, RTP	
Power Input Power Consumption Local Storage IR Illuminator Lens Focus Video Encoding Video Streams Frame Rate Supported Protocols Unicast Operating	Max 9W (with IR on, motorized lens working) Micro SDHC Max 128GB Self Adaptive or Smart IR 30m 2.8mm - 12mm motorized lens Auto Focus H.264 and MJPEG bit rate control (CBR and VBR) Triple streams 25fps @ 2 MP 1080P(1920x1080) 1.3M(1280x 960) 720P(1280x 720) D1(704x 576/704x 480) CIF(352x 288/352x 240) TCP/IP, UDP, ICMP, IPv4, IPv6, QoS, HTTP, HTTPS, SMTP, FTP, RTSP, UPnP, DNS, NTP, RTP 20users	

Operating Humidity	Upto 90% Non-condensing	
Certification	CE, FCC, UL	
Required		
Approved Makes	Axis, Honeywell & Pelco	Compliance
Product Line Description	Standalone Network Video Recorder	Compliance (Only Yes or No)
	Standalone Network Video Recorder	
Make	Bidder to specify	
Model	Bidder to specify	
Type	Rack-mountable, Dedicated Network Video Recorder with suitable hardware to connect up to 64 channel IP cameras. Offered storage is not an externally attached device to NVR, the total recording storage requirement shall be met through internally installed HDD itself. The bidder to submit the storage analysis for required no of cameras for a period of 30 days @25fps on minimum 1080P resolution.	
StorageCapacity	Each NVR storage unit should be provided with Internal storage supports 8 HDDs expandable up to 64 TB (8 TB each)	
Audio Input/Output	1 Channel Input/1 Channel Output	
Two-Way	Supported	
Communication		
Interface Programmable	2 HDMI(1 HDMI up to 3840 * 2160: 1 VGA 2 nd HDMI Output	
Video Output	Liavy on Embadded on Microsoft	
OperatingSystem Network Throughput	Linux or Embedded or Microsoft Input 320 Mbps: Output 320 Mbps	
Record Bit Rate	320 Mbps	
Bit Rate	16 kbps – 20 mbps per channel	
Video Compression	H.265, H.264, MJPEG/MPEG4	
Recording Support	The offered NVR must be able to support simultaneous recording of 64 IP cameras at 1080p resolution at 25/30 fps	
No. of playback streams	Bidder to specify	
RecordingResolutio n	12 MP (4000 × 3000); 8 MP(3840 × 2160); 6 MP (3072 ×2048); 5 MP (2560 × 1920); 4MP (2560 × 1440); 3 MP (2048× 1520); 1080p (1920 × 1080);720p (1280 × 720); D1 (704 ×576 / 704 × 480); CIF (352 × 288/ 352 × 240)	
Network Protocol Support	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,	

Accessories Under bidder's scope: All required cables, connectors & interfaces, mounting arrangement, software's etc. for successful installation, commissioning of NVR. Documentation Installation guide, Operation & Maintenance Manuals, Installation CD/DVD for licensed software Input 100-240 V AC, 50/60 Hz. Voltage Toompatibility The supplied NVR must be compatible in all respects to the cameras being supplied at the locations Power Bidder to specify Consumption Operating -10°C ~ 55°C or better temperature Operating Humidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details Bidder to submit the details of complete offered solution (Idem make, model/part code, block diagram etc.) as stated above along with the offer Solution (Idem make, model/part code, block diagram etc.) as stated above along with the Offer UL, EN, FCC Required Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3a, 802.3x, 802.3a, 802.3t, 802.3a, 80		DDNS, FTP, Alarm Server, IP Search, P2P.	
software's etc. for successful installation, commissioning of NVR. Documentation Installation guide. Operation & Maintenance Manuals, CD/DVD for licensed software Input 100–240 V AC, 50/60 Hz. Voltage Compatibility The supplied NVR must be compatible in all respects to the cameras being supplied at the locations Power Bidder to specify Consumption Operating temperature Operating 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE-capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3at, 802.3	Accessories		
Commissioning of NVR.		connectors & interfaces, mounting arrangement,	
Documentation		software's etc. for successful installation,	
Manuals, Installation			
Input 100-240 V AC, 50/60 Hz. Voltage 100-240 V AC, 50/60 Hz. Compatibility The supplied NVR must be compatible in all respects to the cameras being supplied at the locations Power Bidder to specify Consumption Operating -10°C ~ 55°C or better temperature Operating Humidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required With offer Submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Makes Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3a, 802.3a	Documentation	Installation guide, Operation & Maintenance	
Input			
Voltage Compatibility The supplied NVR must be compatible in all respects to the cameras being supplied at the locations Power Bidder to specify Operating temperature Operating To comply with CE, FCC, Type Test, CCC; UL Details ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3a, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		CD/DVD for licensed software	
The supplied NVR must be compatible in all respects to the cameras being supplied at the locations Power Consumption Deperating Operating Operat	Input	100~240 V AC, 50/60 Hz.	
respects to the cameras being supplied at the locations Power Bidder to specify Consumption Operating temperature OperatingHumidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Gere Required Approved Makes Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3a, 802.3at, 802.3a	Voltage		
locations Bidder to specify Consumption Consumption Consumption Consumption Consumption Corporating Corporation Corporatio	Compatibility	The supplied NVR must be compatible in all	
Power Consumption Operating University Operating Operati		respects to the cameras being supplied at the	
Consumption Operating temperature OperatingHumidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details required with offer Solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at, 802.3at Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		locations	
Consumption Operating temperature OperatingHumidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details required with offer Solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3x, 802.3p, 802.3q, 802.	Power	Bidder to specify	
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temperature OperatingHumidity 10% to 90% RH, non-condensing ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details required with offer Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification UL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3a,	•	-10°C ~ 55°C or better	
OperatingHumidity ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details required with offer Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification QUL, EN, FCC Required Approved Makes Axis, Honeywell, Pelco Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3at, 802.3at, 802.3qt, 802.3qt, 802.3qt, 802.3qt, 802.3at, 802.3qt,	-		
ProductSafety To comply with CE, FCC, Type Test, CCC; UL Details required with offer Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Required Approved Makes Axis, Honeywell, Pelco Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	1	10% to 90% RH, non-condensing	
Details required with offer Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Required Approved Makes Axis, Honeywell, Pelco Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		, , , , , , , , , , , , , , , , , , , ,	
Details required with offer Bidder to submit the details of complete offered solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Required Approved Makes Axis, Honeywell, Pelco Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	ProductSafety	To comply with CE, FCC, Type Test, CCC; UL	
required with offer solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Required Approved Makes Axis, Honeywell, Pelco Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3at, 802.3at, 802.3qt, 802.3qt, 802.3at, 802.3at, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	,		
required with offer solution (Item make, model/part code, block diagram etc.) as stated above along with the offer Certification Required Approved Makes Axis, Honeywell, Pelco Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.3ad, 802.3at, 802.3at, 802.3qt, 802.3qt, 802.3qt, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Details	Bidder to submit the details of complete offered	
Offer Certification Required Approved Makes Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	required with offer	solution (Item make, model/part code, block	
Certification Required Approved Makes Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	•	<u>-</u>	
Required Approved Makes Axis, Honeywell, Pelco 8 Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		offer	
Approved Makes Axis, Honeywell, Pelco B Port Switch with 2 Fiber Port Compliance (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Certification	UL, EN, FCC	
Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Required		
8 Port Switch with 2 Fiber Port (Only Yes or No) Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Approved Makes	Axis, Honeywell, Pelco	
Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Approved makes		
Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+ capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	Approved Makes	·	Compliance
capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3at, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		per Port	_
ports loaded with 2 nos. of SMF modules. Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.		oer Port	(Only Yes or
Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum	8 nos. 10/100/1000 Base-T ports with PoE+	(Only Yes or
rate. Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 Fits Switch shall have minimum capability and minimum 60W	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink	(Only Yes or
Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 Fits Switch shall have minimum capability and minimum 60W	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink	(Only Yes or
Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules.	(Only Yes or
802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3af, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules.	(Only Yes or
802.3az, 802.3af, 802.3at. Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate.	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding	(Only Yes or
Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate.	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding	(Only Yes or
Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w,	(Only Yes or
IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 80	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w,	(Only Yes or
Security. Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 80 802.3az, 802.3af, 802.3at.	18 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 102.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 102.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 102.1p, 802.1Q, 802.3 and 802.3z, 102.2p, 802.3 and 802.3z, 102.2p, 802.3 and 802.3	(Only Yes or
Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 802.3at. Switch should support port see	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ords of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection,	(Only Yes or
applications and Ipv6 First Hop Security. Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 802.3at, 802.3at. Switch should support port see IP Source guard, BPDU Guard.	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ords of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection,	(Only Yes or
Switch should be Ipv6 Certified/Ipv6 logo ready.	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 802.3at, 802.3at. Switch should support port see IP Source guard, BPDU Gua Security.	of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection, rd, spanning tree root guard and IPv6 First Hop	(Only Yes or
1 1 0 1	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 80 802.3az, 802.3af, 802.3at. Switch should support port see IP Source guard, BPDU Gua Security. Ipv6 QoS, Ipv6 ACL, Multica	of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 102.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 102.1p, 802.1q, 802.3d, 802	(Only Yes or
Approved Makes: CISCO	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 802.3at, 802.3at. Switch should support port see IP Source guard, BPDU Gua Security. Ipv6 QoS, Ipv6 ACL, Multica applications and Ipv6 First Hope Switch should support port see IP Source guard, BPDU Gua Security.	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection, rd, spanning tree root guard and IPv6 First Hop ast Listener Discovery (MLD v1/2) snooping, Ipv6 p Security.	(Only Yes or
	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 80 802.3az, 802.3af, 802.3at. Switch should support port see IP Source guard, BPDU Gua Security. Ipv6 QoS, Ipv6 ACL, Multica applications and Ipv6 First Hop Switch should be Ipv6 Certifie	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection, rd, spanning tree root guard and IPv6 First Hop ast Listener Discovery (MLD v1/2) snooping, Ipv6 p Security.	(Only Yes or
	8 Port Switch with 2 File Switch shall have minimum capability and minimum 60W ports loaded with 2 nos. of SM Shall have minimum 20 Gbps rate. Should support IEEE Standa 802.1x, 802.3ad, 802.3x, 80 802.3az, 802.3af, 802.3at. Switch should support port see IP Source guard, BPDU Gua Security. Ipv6 QoS, Ipv6 ACL, Multica applications and Ipv6 First Hop Switch should be Ipv6 Certifie	8 nos. 10/100/1000 Base-T ports with PoE+ of PoE Power and additional 2 nos. Combo uplink F modules. of switching fabric and 14.88Mpps of forwarding ards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 02.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, curity, DHCP snooping, Dynamic ARP inspection, rd, spanning tree root guard and IPv6 First Hop ast Listener Discovery (MLD v1/2) snooping, Ipv6 p Security.	(Only Yes or

24 Port Switch with 2 Fiber Port	Compliance (Only Yes or
	No)
Switch shall have minimum 24 nos. 10/100/1000 Base-T ports with PoE+	
capability and minimum 180W of PoE Power and additional 2 nos. Combo uplink	
ports loaded 2 nos. with SMF modules.	
Shall have minimum 56Gbps of switching fabric and 41Mpps of forwarding rate.	
Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w,	
802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z,	
802.3az, 802.3af, 802.3at.	
Switch should support port security, DHCP snooping, Dynamic ARP inspection,	
IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop	
Security.	
Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6	
applications and Ipv6 First Hop Security.	
Switch should be Ipv6 Certified/Ipv6 logo ready.	
Approved Makes: CISCO	
Supplying, Installation, Testing & Commissioning of 43" LED TV with	
1920x1080 full HD resolution and as per specifications attached suitable for	
mounting on wall including connection etc.	
Approved Makes: Samsung, LG & Panasonic.	

Bidder needs to submit the case specific MAF on the OEM Letter Head for Camera, NVR & Switch and no MAF will be entertained from the authorized distributor of the OEM, otherwise bids will be rejected.NVR & Cameras should be from the same make only.

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

	Signature of Bidder
Name:	
Designation:	
Organization Name:	
Contact No. :	

Annexure - II

Technical Bid commercialQualification Criteria for CCTV Camera, NVR etc.

S.No	Basic	Specific Requirement	Documents
	Requirement	The hidder should be a company	Required
1.	Legal Entity	The bidder should be a company registered under Indian Companies Act, 1956 or a partnership firm registered under Indian Partnership Act, 1932.	Copy of certificates of Incorporation/ Registration
2.	Financial: Turnover	Average Annual Turnover of the bidder during the last three financial years, i.e., 2014-2015, 2015-2016 and 2016-2017 (as per the last published audited balance sheets), should be at least 100% of the estimated value of the project. The bidder should have not incurred loss in any of the last 3 financial years	CA Certificate with CA's Registration Number / Seal
3.	Financial: Reference Projects	The bidder must have completed similar video Surveillance works during the period between 01.01.2013 to 31.12.2017 of minimum value of not less than 80% of estimated contract value against one single order or two orders of similar works each costing not less than 60% of estimated contract value or three orders of similar works each costing not less than 40% of estimated contract value.	PO Copy and Completion Certificate
4.	Technical Capability	The bidder must have successfully completed at least one video surveillance project having minimum 150 cameras in any one project in Govt. Buildings/ Metro/ Airport/ IT Infra/City Surveillance in India during last 5 financial years. The bidder should be in the business of supply, installation, testing, commissioning & maintenance of CCTV systems for at least last 7 years.	Completion Certificate from the Client.
5.	Tax registration and clearance	The lead bidder should have a registered number of GST PAN number	Copies of relevant certificates of registration GST and PAN number.
6.	ISO Certifications	The bidder must possess at the time of bidding, a valid ISO9001 or higher.	Copy of a valid certificate
7.	OEM for NVR and Cameras	The bidder should propose NVR and cameras from the same OEM.	Self - Declaration

	Setup	The bidder must have local office or service setup in within 40 KMs of the	Copy of relevant proof
9.	Mandatory Undertaking	Project location to Meet the SLA's. Bidder should:- a) Not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons; b) not have, and their directors and officers not have been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings; c) not have a conflict of interest in the procurement in question as specified in the bidding document. d) comply with the code of integrity as specified in the bidding document.	Self - Declaration
10	CCTV Cameras	1.1 All CCTV cameras, Recording hardware & Software, CCTV Analytic Solution and command and control application proposed in the RFP/ NIT should be from the same OEM to ensure seamless integration and single point of contact and ownership with CCTV OEM 1.2 All CCTV cameras offered in the project should be UL & CE and FCC certified. 1.3 ALL the CCTV cameras should be ONVIF PROFILE S & G complaint to maintain the open/ heterogeneous environment.	Self - Declaration Copy of a valid certificate
11.	OEM for CCTV	1.1 OEM for CCTV shall have authorized CCTV service/ repair facility in nearest metropolitan city of New Delhi or National Capital Region. 1.2 OEM for CCTV equipment should have its own registered company in India for more than 10 years 1.1 Offered CCTV solution should be	Copy of a valid certificate

CCTV	seamlessly integrated with existing Access Control, Fire System and Intrusion Alarm System/other building security subsystems.	
Others	1.1 Successful Technical bids shall mean the bidder declared technically successful strictly based on the layout, design parameters, OEM technical requirements, terms & conditions and specification given in the tender document. 1.2 All the bidders to confirm that they will have to conduct a proof of concept (POC) for all IP cameras along with DVR/ NVR/NMS/VMS respectively along with software and other accessories 1.3 All the GradeNetwork Switch from CISCO only, As the CISCO only approved brand inIIT Delhi.	OEM for all items other than (Camera/VMS/NVR Switches) be attached.

Organization Letter Head DECLARATION SHEET

We,	hereby certify that all the information and data furnished by
gone through the specification, conditions and s	eification are true and complete to the best of our knowledge. I have stipulations in details and agree to comply with the requirements and
intent of specification.	
further certified that our organization meets document. Moreover, OEM has agreed to support for the warranty.	authorized (Copy attached) by the OEM to participate in Tender. We all the conditions of eligibility criteria laid down in this tender port on regular basis with technology / product updates and extend dized due to academic discount given to IIT Delhi.
1	
We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.	NAME & ADDRESS OF THE Vendor/ Manufacturer / Agent
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 GST Number	
7 PAN Number	
(In case of on-line payment of Tender Fees)	
8UTR No. (For Tender Fee)	
(In case of on-line payment of EMD)	
9 UTR No. (For EMD)	

(Signature of the Bidder)

Name:

List of Govt. Organization/Deptt.

three years (must be supported with work	whom the Bidder has undertaken such work corders)	
Name of the organization	Name of Contact Person	Contact No.
	e Engineer who have the technical compet	tency to handle and
upport the quoted product during the value of the organization	warranty period. Name of Contact Person	Contact No.
	Name of Contact I elson	Contact No.
		Signature of Bidde
	Organization Name:	
	Contact No.:	

On line Bid Submission:

The Online bids (complete in all respect) must be sealed intwo Envelops as explained below:-

Envelope – 1 (Following documents to be provided as single PDF file)			
Sl. No.	Documents	Content	File Types
1.	Technical Bid	Compliance Sheet as per Annexure - I	.PDF
2.		Compliance Sheet as per Annexure - II	.PDF
3.		Organization Declaration Sheet as per Annexure - III	.PDF
4.		List of organizations/ clients where the same products have been supplied (in last five years) along with their contact number(s). (Annexure-IV)	.PDF
5.		Technical supporting documents in support of all claims made at Annexure- I & II (Annexure- V)	.PDF
Envelope – 2			
Sl. No.	TYPES	Content	
1.	Financial Bid	Price bid should be submitted in BOQ format.	.EXCEL