

# UNIVERSITY OF KALYANI



CENTRE FOR INFORMATION RESOURCE MANAGEMENT(CIRM)

## NOTICE INVITING E-TENDER

**NIT ID showing at <http://wbtenders.gov.in>: 2025 UOK 966758 1**

Tender Ref. No.: KU/NIET/CCTV/2025-26/01

Dated: 03/12/2025

Online E-Tender is invited for **Supply and Installation of CCTV System for the Girls' Hostel (Research Scholars), University of Kalyani** by the eligible venders. Interested venders may follow the instructions as given below for submission of their tenders under online mode:

### Technical Specification

Specification for 32ch NVR		
Sr no	Specifications	Requirement
1	IP Camera Input Channel	32
2	Operating System	Embedded LINUX
3	Network Bandwidth	Up to 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing
4	Decoding Capability	2 Channel 32 MP@25 fps, 2 Channel 24 MP@25 fps, 4 Channel 16 MP@30 fps, 5 Channel 12 MP@30 fps, 8 Channel 8 MP@30 fps, 10 Channel 6 MP@30 fps, 12 Channel 5 MP@30 fps, 16 Channel 4 MP@30 fps, 32 Channel 1080p@30 fps
5	Video Compression	H.265+, H.265, H.264+, H.264
6	Smart Function	Face detection, Face recognition, Perimeter protection
7	Perimeter Protection	Up to 4 Channel
8	Face Recognition	At Least 2 Channel
9	Face Detection	At Least 2 Channel
10	Resolution	32 MP, 24 MP, 16 MP, 12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 2MP, 720p, 960p, D1, CIF, QCIF
11	Video Display Split	Main screen: 1/4/8/9/16/25/36; Sub screen: 1/4/8/9/16
12	Video Output	2-channel VGA, 2-channel HDMI video output. Heterogeneous video source output for HDMI and VGA
13	HDD Support	4 SATA ports, Up to 20 TB Per slot
14	Simultaneous Playback	Up to 16 Channels
15	Record Mode	General, Motion detection, Intelligent, Alarm
16	Playback Mode	Instant playback, General playback, Event playback
17	Smart Mobile Phone	iPhone, iPad, Android Phone

18	Browser	Chrome, IE, Edge
19	Interface	3 USB , 1 RS232, 1 RS485
20	Audio In	1 channel
21	Audio Out	1 channel
22	Audio Compression	G.711a; G.726;PCM, AAC
23	Alarm I/O	16/6 channel In/Out
24	Ethernet	2 No. of RJ-45 (10/100Base-T)
25	Protocols	HTTP, HTTPS, TCP/IP, IPv4, UDP, NTP, DHCP, DNS, SMTP, UPnP, DDNS, Alarm Server, Multicast, P2P, Auto Registration, iSCSI; ONVIF 2.12(Profile T; Profile S; Profile G)
26	Operating Temperature	-10 °C to +50 °C
27	Operating Humidity	10%–93% (RH)
28	Power Source	12 VDC, 4Amp
29	Certification	CE,FCC,BIS, ROHS

### Specification for 4MP Fixed Lens Dome Camera

Sr no	Specifications	Requirement
1	Image Sensor	1/2.7" 4 Megapixel Progressive Scan CMOS
2	Minimum Illumination	0.003 Lux/F1.4
3	Effective Pixels	2688(H) x 1520(V)
4	Shutter Speed	Auto/Manual, 1/3 s~1/100000s
6	White Balance	Auto, Manual, Natural, Regional Custome, Street Lamp, outdoor
7	Lens	3.6 mm
8	RAM &ROM	128 MB and 128 MB or better
9	Iris Control	Fixed
10	Gain Control (AGC)	Auto/Manual
11	Max. Aperture	F1.4
12	S/N Ratio	>58 dB
13	Video Compression	H.265+/H.265/H.264
14	Light Compensation	BLC, HLC
15	WDR	120 dB
16	Video Streaming	Quad Steam supported; Main stream : 4 MP @20 fps; Second Stream: D1 @25 fps; Third stream: D1 @25 fps; Fourth Stream: D1 @1fps
17	Mirror	Yes
18	Resolution	4MP (2688 × 1520); 3MP (2304 × 1296); 1080P (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)
19	Motion detection	Up to 4 Zone
20	Audio Input / Output	1 Channel/1 Channel
21	Built in Mic	Yes
22	Audio Compression	G.711a/ G.711Mu/ AAC/ G.726
23	Alarm IN/Out	1 Channel /1 Channel
24	Bit Rate	3 Kbps–6144 Kbps for H.264 and H.265

25	Protocol	IPv4; IPv6; HTTP; HTTPS, TCP/IP; UDP; RTP; RTSPS; RTCP; SMTP; SFTP; DHCP; DNS; NTP; ICMP; NFS; PPPoE; SSL; SNMP; ONVIF (Profile S/Profile G/Profile T); Unicast, Multicast
26	Smart Detection	Tripwire, Intrusion
27	Ethernet	RJ-45 (10/100Base-T)
28	User/Host	6
29	IR	IR Range of 50 Mtrs
30	Warm Light	Up to 30 meter
31	Micro SD	Micro SD Card, Max 512GB or better
32	Operating Temperature	-30°C to +60°C
33	Humidity	Less than 95% RH or better
34	Power Source	DC12V, PoE (802.3af)
35	Weatherproof Standard	IP67, IK10
36	Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot
37	Certification	CE, FCC, BIS, ROHS

### Specification for 4MP Fixed Lens Bullet Camera

Sr no	Specifications	Requirement
1	Image Sensor	1/2.7" 4 Megapixel Progressive Scan CMOS
2	Minimum Illumination	0.003 Lux/F1.4
3	Effective Pixels	2688(H) x 1520(V)
5	Shutter Speed	Auto/Manual, 1/3 s~1/100000s
6	White Balance	Auto, Manual, Natural, Regional Custome, Street Lamp, outdoor
7	Lens	3.6 mm
8	RAM &ROM	128 MB and 128 MB or better
9	Iris Control	Fixed
10	Gain Control (AGC)	Auto/Manual
11	Max. Aperture	F1.4
12	S/N Ratio	>58 dB
13	Video Compression	H.265+/H.265/H.264
14	Light Compensation	BLC, HLC
15	WDR	120 dB
16	Video Streaming	Quad Steam supported; Main stream : 4 MP @25 fps; Second Stream: 720p @25 fps; Third stream: D1 @25 fps; Fourth Stream: D1 @1fps
17	Mirror	Yes
18	Resolution	4MP (2688 × 1520); 3MP (2304 × 1296); 1080P (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)
19	Motion detection	Up to 4 Zone
20	Privacy Masking	Up to 4 area

21	Audio Input / Output	1 Channel/1 Channel
22	Built in Mic	Yes
23	Audio Compression	G.711a/ G.711Mu/ AAC/ G.726
24	Alarm IN/Out	1 Channel /1 Channel
25	Bit Rate	3 Kbps–6144 Kbps for H.264 and H.265
26	Protocol	IPv4; IPv6; HTTP; HTTPS, TCP/IP; UDP; RTP; RTSPS; RTCP; SMTP; SFTP; DHCP; DNS; NTP; ICMP; NFS; PPPoE; SSL; SNMP; ONVIF (Profile S/Profile G/Profile T); Unicast, Multicast
27	Smart Detection	Tripwire, Intrusion, Classification of Human and Vehicle
28	Ethernet	RJ-45 (10/100Base-T)
29	User/Host	6
30	IR	IR Range of 50 Mtrs
31	Warm Light	Up to 30 meter
32	Micro SD	Micro SD Card, Max 512GB or better
33	Operating Temperature	-30°C to +60°C
34	Humidity	Less than 95% RH or better
35	Power Source	DC12V, PoE (802.3af)
36	Weatherproof Standard	IP67
37	Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot
38	Certification	CE, FCC, BIS, ROHS

### Specification for 24Port POE Switch

Sr no	Specifications	Requirement
1	Interface	Should have minimum 24 x 1G base-T PoE+ ports with 2 x 1G Base-X SFP ports, should be 1U rack mountable, rack mount kit must be available
2	Physical	Should have the followings or better: 800MHz ARM A55 Single Core CPU, 512MB RAM, 64MB FLASH, IEEE 802.1Q VLAN Tagging, IEEE 802.3ad Trunking (LACP), IEEE 802.1AB LLDP, IEEE 802.3az Energy Efficient Ethernet (EEE), Auto-voice VLAN, IEEE 802.1Q tag vlan, minimum 256 vlans, IEEE 802.1p (Class of Service), DSCP - L3 based QoS, Port -based ingress/egress rate limiting, 190 Watt PoE budget or higher.
3	Performance	Must have or better: Packet buffer memory- 1.5 MB, Bandwidth: 52 Gbps, Priority queues: 8, Priority queuing Weighted Round Robin, MAC address database size -16K, MPPS:- 38.6 or better, Multicast groups: 8K, Number of DHCP snooping bindings: 256, Access Control Lists- 100, Jumbo frame support: Up to 10K packet size, MTBF- 17,84,600 hours or more, Acoustic noise level @ 25°C (dBA): 26.1 dBA
4	L2 Service	Should support: Broadcast, multicast, unknown unicast storm control, IEEE 802.1D, IEEE 802.1W, IEEE 802.1S, IGMP snooping (v1, v2 and v3), MLD snooping support (v1 and v2), IGMP snooping queries, Block unknown multicast, MVR etc.
5	L3 Service	Should support DHCP client, DHCP snooping, Host ARP table

6	Security	Must have SNMP v1, v2c, v3, RMON group 1,2,3,9, IEEE 802.1x, Guest Vlan, MAC-based .1x, RADIUS accounting, IP-based ACLs (IPv4 and IPv6), MAC-based ACLs, TCP/UDP-based ACLs, MAC lockdown, MAC lockdown by the number of MACs, IEEE 802.1x RADIUS port access authentication, Port-based security by locked MAC addresses, Broadcast, multicast, unknown unicast storm control, DoS attacks prevention, Dynamic ARP inspection etc.
7	QoS	Should have: Port-based rate limiting - Egress only, Port-based QoS, Support for IPv6 fields, DiffServ, IPv4 and v6 DSCP, IPv4 and IPv6 ToS, Weighted Round Robin (WRR), Destination MAC and IP, TCP/UDP-based, Strict priority queue technology, Auto-VoIP VLAN / Auto-Voice VLAN - Yes, based on OUI bytes (default database and user-based OUIs) in the phone source MAC address, Auto-VoIP, Auto-Voice Vlan, Auto-Video Vlan etc.
8	Management	Must have the following features: Password management, Configurable management vlan, Web-based graphical user interface (GUI), Dual software (firmware) image, Cable test utility, SSL/HTTPS Web-based access (version): Yes (v3), TLS Web-based access (version): Yes (v1.0), File transfers (uploads, downloads): TFTP/HTTP, HTTP upload/download (firmware)
9	Led	Must have: Per port Speed, Link, Activity
10	Power Consumption	Should comply with the followings: Worst case, all ports used, line-rate traffic :- <than 21Watts
11	Environment	Must have or better: Operating temperature : 0° to 50°C (32° to 122°F), Operating Humidity (relative) : 95% maximum relative humidity (RH), non-condensing
12	Certification	Must have: CE, FCC Class A, RCM, ICES Class A, VCCI, KC, BSMI, MTCTE from TEC, CB, CSA
13	Warranty	Lifetime Hardware replacement warranty, Lifetime free latest firmware support, Replacement with New Product Only No refurbished Products

### Specification for Cat6 UTP Cable

Sr no	Feature	Requirement
1	Type	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/ TIA/ EIA- 568 - C. 2. Additional Transmission Performance Specifications for 4- pair Category 6 cable should comply with ultrahigh speed data networks such as Gigabit Ethernet (1000 BaseT and 1000 Base-TX).
2	Gauge	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet a n d consist of 4 pair, 23 AWG, UTP.
3	Jacket material	Jacket material should be FR- PVC
4	Mechanical Characteristics	Incorporates c e n t r a l s p i n e maintaining pair separation during installation to ensure premium performance after installation. Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. Conductor Solid Copper Conductor Diameter 0. 56 ± 0. 005 mm (23 AWG) Insulator Polyolefin Outer Diameter 6. 0 ± 0. 4 mm Max. Temperature 75 °C
5	ROHS/ ELV	Compliant
	ETL	Cable Should be tested @700 MHz by ETL / Intertek. Certificate 5 need to submit along with bid

### Specification for 32 INCHES SMART ANDROID PROFESSIONAL DISPLAY UNIT

Feature	Requirement	
DISPLAY PANEL	SCREEN SIZE	32 Inches
	ASPECT RATIO	16:09
	RESOLUTION	(1366*768)
	DUTY CYCLE	24x7
	BRIGHTNESS	350 nits

	PANEL TECHNOLOGY	IPS (In Plane Switching)
	ORIENTATION	Portrait and Landscape
	VIEWING ANGLE	178° : 178°
CONNECTION TERMINAL	RF IN	1*Side
	AV IN	1mini*Side
	USB INPUT (2.0 SUPPORT)	USB 2.0x1; USB 3.0x1
	HDMI INPUT	2*Side
	SPDIF OUT	YES, optical
	RJ-45	1*Side
	USB DEVICE SUPPORT	USB Supported HDD
	SUPPORTED FORMATS	PNG/BMP/JPG
	PICTURE FORMAT	H.265/H.264/H.263/MPEG1/
	VIDEO FORMAT	MPEG2/MPEG4/AV1
	AUDIO FORMAT	MPEG1/2/MPEG4/AC3/ EAC3/AAC/WMA/FLAC
AUDIO	Audio Output Power (RMS)	10+10W
	DOLBY DIGITAL	Yes , HDR 2K
	CEC	Yes, function ready
	SOUND OUT (ARC)	Yes
	DOLBY AUDIO	Yes
	HDR10	Yes, HDR10/HLG
	BLUETOOTH VER. (TV)	Yes
	INTERNET LINK	Yes
	WIFI TYPE (STANDARD)	802.11a/b/g/n/ac 2.4G/5G 2T2R, Build-in
	DEVICE LINKING SUPPORTED	HDMI-CEC
SOC SPECIFICATIONS	CPU	Cortex-A55 x4,1.3GHz
	GPU	Mali G31 MP2, Open GL ES3.2
	OS & VERSION INFO	Android TV 'R' - 11.0
	MEMORY FLASH	8GB EMMC
	RAM	1.5GB, DDR3 2133Mhz
	ANDROID FEATURE	Built in Google assistant and Google playstore
	AUDIO LINK	Two-Way Bluetooth Audio Link
	BOYD FEATURE	Built-in Chromecast
ELECTRICAL POWER	Operating voltage	110V-240V~ at 50/60Hz
	power Consumption	50W
	STD by power consumption	<0.5 W
WARRANTY	OEM WARRANTY	3 Years on site support.
<b>Specification for 4u Rack</b>		
<b>Sr</b>	<b>Feature</b>	<b>Requirement</b>

no		
1	Network Rack	19" 4U/ 550mmW / 500mmD Loaded Rack CKD (1XFAN 230VAC 90 cfm +1XPDU 6sockets + 1XHardware)

Sl.No.	Activities	Date & Time
1	Date of uploading of N.I.T. Documents in the e-tender portal of NIC : <a href="https://wbttenders.gov.in">https://wbttenders.gov.in</a>	3 <sup>rd</sup> December, 2025
2	Documents download (online)	3 <sup>rd</sup> December, 2025 (from 18.00 Hrs.)
3	Bid Submission Start Date(on line)	3 <sup>rd</sup> December, 2025 (from 18.00 Hrs.)
4	Bid Submission Closing Date (Online)	26 <sup>th</sup> December, 2025 (up to 16.00 Hrs.)
5	Bid Opening Date (Online) – Technical Bid	29 <sup>th</sup> December, 2025 (from 11.00 Hrs.)
6	Date of uploading list for technically qualified bidder (online)	To be notified
7	Date of opening of Financial Bid	To be notified
8	Date of uploading of list of bidders along with the approved Rate	To be notified

**1. General Instructions:**

In the event of e-tendering, intending bidder may download the tender documents from the website: <http://wbttenders.gov.in> directly with the help of Digital Signature Certificate (DSC) or from the University of Kalyani's website [www.klyuniv.ac.in](http://www.klyuniv.ac.in).

**2. Submission of bids:**

Both Technical bid and Financial Bid are to be submitted concurrently duly digitally signed by the Company personnel who is in the pay roll of the Company (having Authorization from the Company management) in the website <http://wbttenders.gov.in>. All papers must be submitted in English language.

**3. Time Schedules for the e-tender:**

The Time Schedule for obtaining the Bid Documents, Pre Bid meetings, the submission of bids and other documents etc. will be as per the list provided in Clause No. 10 given below.

**4. Eligibility for Quoting:**

Manufacturers or Dealers/Distributors/Agents duly authorised by the manufacturers who are able to supply the assured quantities as per requirement & have requisite qualification for meeting the requirements as per this tender are only eligible for quoting.

Further, vendors who were declared black listed and/or insolvent by any Govt. Concern/any Institutions in the Country for particular item or items are not eligible to participate in the current tender for that item or items.

**5. Annual Turnover Requirements:**

**Vender having average annual Turn Over for last three financial years is more than Rs.20 Lakh in India for the year 2021-22, 2022-23 & 2023-24 are eligible to participate in the Tender.**

**6. Submission of Tenders**



## 6.1 General process of submission

Tenders are to be submitted online through the website stated in Clause 1. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked for in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders at a time, one is Technical Bid and the other is Financial Bid. The tenderer shall carefully go through the documents and prepare the required documents and upload the scanned documents of originals in Portable Document Format (PDF) to the portal in the designated locations/folders of Technical Bid. He needs to fill up the BOQ in the designated cell and upload the same in designated location of Financial Bid. The documents uploaded are virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should specially take note of all the addendum/corrigendum related to the tender till the bid submission ends. Tenderers should in general upload the latest documents as part of the tender, however, in case of failure in uploading such documents, it will be deemed that they (tenderers) have taken note of such latest documents including addendum/corrigendum, if published till the bid submission ends.

## 6.2 Technical Bid

The Technical Bid should contain scanned copies and/or declarations in the following standardised formats in two covers (folders):

### I. Technical File (Statutory Cover) containing:

#### 1. Annexure –

- a) Basic Information (Vide Annexure I) *(to be submitted in “Annexure” folder)*
- b) Application for Tender - (Vide Annexure II) *(to be submitted in “Annexure” folder)*
- c) Authorization letter - (Vide Annexure III) *(to be submitted in “Annexure” folder)*
- d) Affidavit Proforma - (Vide Annexure IV) *(to be submitted in “Annexure” folder)*
- e) DECLARATION ON NIT - (Vide Annexure V) *(to be submitted in “Annexure” folder)*
- f) Technical Compliance Sheet (Vide Annexure VI) *(to be submitted in “Annexure” folder)*

2. Technical details of the Items Quoted (Bidders must submit Technical specification along with Catalogue of the item quoted in “**Technical Details**” Folders.

3. Bidder must submit Audited Balance Sheet and Profit and loss Account for last 3 (three) financial year namely **2021-22, 2022-23 & 2023-24** in “**Accounts**” folder.

### II. My Document (Non-Statutory Cover) containing as follows:

Sl. No.	Category	Sub-Category	Sub-Category Description
1	Certificates	Certificates	PAN Card of the Bidder
			GST Registration Certificate
			Profession Tax Enrolment Certificate
2	Company Details	Company Details 1	Trade License /Enlistment Certificate/Registration Certificate under Shop & Establishment Act(for the States of India where Trade License are not issued)

			Registration with Registrar of Companies
			Memorandum of Articles for Limited Companies.
3	Credential	Credential 1	a) Copy of the purchase order for supplying Similar nature of items for last 5 years (2019-20,2020-21,2021-22, 2022-23 & 2023-24) b) Brief User List preferably for users in West Bengal in an Institute of Higher Learning
4	Financial Information	Payment Certificate 1	Income Tax Returns submitted for the Assessment year 2022-23
			Income Tax Returns submitted for the Assessment year 2023-24
			Income Tax Returns submitted for the Assessment year 2024-25
			GST Return for January'24, February'24 and March'24

**NOTE:**

1. If the company was set up less than three years ago, audited balance sheet for the no. of years since inception may be submitted)
2. Addenda/Corrigenda: if published, Contractors are to keep track of all the Addendum/Corrigendum issued with a particular NIT till the bid submission ends and in general upload the downloaded copies of the above documents and merge the Addenda/Corrigenda with respective NIT in the NIT folder. , however, in case of failure in uploading such documents, it will be deemed that they (tenderers) have taken note of such latest documents including addendum/corrigendum, if published till the bid submission ends, overriding any other terms/conditions if mentioned anywhere else in the concerned NIT.
3. Bidder must submit their documents through the appropriate folders as stated above. Submission of document not through proper folder(s) may be considered as non-submission. If University fails to identify the document because of such wrong submission or due to submission of documents not readable visibly or for any technical issue like not opening the files etc., it would be deemed that the bidder did not submit that particular document(s).
4. Others: Any other documents found necessary

### 6.3 Financial Bid

The Financial Bid should contain the following document in one cover (folder):

**Bill of Quantities (BOQ): The tenderer should fill-up the designated cell as marked by the University in the BOQ sheet.**

7. The tenderers are not required to submit hard copies of Technical File (Statutory) or My documents (Non-Statutory). Submission of hard copy of Financial Bid is strictly prohibited and only be submitted through on line through NIC portal.

### 8. Evaluation of the tenders

During the tender evaluation process, the “Technical Bid” will be opened first. Those Bidders who have qualified in respect of the essential & other requirements in “Technical Bid” will be identified and their financial bid will be opened. The financial bid of those Tenderer failing to meet the technical & other requirements laid down in the tender will not be opened and be

rejected. The Tenderer offering the item found suitable and as per the tender specifications will only be selected. Final selection of the bidder in respect of Financial Bid is subject to further verification of several parameters allied with Financial Bid Evaluation. The Financial Bids of only those tenderers who have been considered as Technically Qualified will be opened.

## **9. TERMS & CONDITIONS REGARDING PURCHASE POLICY OF TENDERING AUTHORITY:**

### **9.1 Bid Information:**

- a) **Bidder must quote in INR as given in the BOQ.**
- b) The rate quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- c) **Bidder must follow the instruction for filling up BOQ as per Clause 6.3.**
- d) **Bidder must quote all items under Power Supply equipment for Computer Lab. Partial Quotation/Incomplete Quotation both for Technical and Commercial aspects may subject to cancellation of tender. However, University Authority is the sole authority to assess the Partial Quotation/Incomplete Quotation based on the tender evaluation status.**

**9.2 Evaluation of Quotation:** The Purchaser will evaluate and compare the quotations determined to be substantially responsive stage wise. Firstly, Technical Bid will be evaluated based on and thereafter Price Bid for technically qualified bidders will be evaluated for selection of vender.

**9.3 Award of Contract:** The purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive both technically and commercially for both the equipments. Purchaser reserves the right to reject any or all the tender, wholly or partly, without assigning any reason thereof and shall not be bound to accept the lowest bid.

**9.4** All essential items including cables, connectors, etc. needed for the smooth operation/installation of the equipment shall be assumed to have been included in the quoted price/items.

**9.5** Installation, testing and commissioning & integration of the components/ equipment in our existing KU-LAN of the purchased items is to be done by supplier at our premises. Charges on account of installation and commissioning, if any, should be included in the quoted price.

**9.6** Vendor(s) supplying part/disjoint equipment should have the responsibility of integrating the same into the existing system/KULAN in consultation of other vendor(s) supplying part/disjoint equipments.

**9.7** Standard OEM warranty for all the active components with up gradation facility must be provided.

**9.8** The vendor should quote and be capable to supply all the necessary accessories for the equipment. However, the university has the right to procure a part or a whole of equipment.

**9.9** Warranty: The manufacturer should give standard OEM guarantee/warranty. If the equipment installed at one location is subsequently shifted to another location, the warranty services shall continue to be provided at new location without any additional financial implications. Undertaking that during warranty period, if any defect in the supplied equipment is noticed by the Purchaser, the supplier or his representative shall rectify the defect or replace the defective

item free of cost at the Purchaser's site at the earliest possible, latest within a period of 30 days of notification.

- 9.10 **Adequate support service facility:** The bidder/manufacture should have adequate service and accessories support center in Kolkata/Kalyani or around **80 KM** radius distance from University premises for any emergency breakdown/fault offering facility within 48 hours and should be agreeable to provide AMC facility after the warranty period. Organization along with dedicated Toll Free no & Escalation matrix, Service ISO Certificate and Calibration certificate need to attached.
- 9.11 **Bidder must provide Technical Compliance Sheet duly certified by OEM as per the Tender Specification. Any non-compliance will lead to rejection of tender.**
- 9.12 **Manufacturer's Authorisation:** Bidder must provide Tender specific OEM Authorisation for IP based CCTV Camera and NVR.
- 9.13 **Credentials:** Documents of supplying similar items in last five financial years in an Institute of Higher Learning must be submitted along with the tender. **Bidder must submit User List with copy of Purchase Order ensuring sale of similar items in reputed institutes/offices in last five financial years.**
- 9.14 **Make & Model:** Bidder must mention Make and Model in the Information Sheet as given vide Annexure-II and must send the product details/catalogue/brochure in the "Technical Details" folder along with Technical Compliance Sheet for each item component.
- 9.15 **Criteria for eligibility of OEM of CCTV component:**

#	Criteria	Supporting Document
1	The OEM of Camera & NVR should have presence and registered office in India since last 10 years (under Company Act, 1956/ 2013). Presence through Distributor/ Dealer network/ Joint Venture/ Subsidiary/ consortium shall not be treated as OEM.	Certificate of incorporation
2	The OEM of Camera, Storage, NVR/ VMS Software and Network Switches should not be an entity having its major shareholding stake by any government or its entity or originated/founded by personnel from Defence origin.	Declaration of OEM on Letterhead
3	The OEM of component such as IP Camera, Storage, NVR/ VMS Software and Network Switches should not be blacklisted or banned or barred by any government agency like GeM or in any country. The OEM Should not be charged or prosecuted for any cheating or fraudulent case(s) in India for their respective product line.	Declaration of OEM on Letterhead

4	The OEM of CCTV Camera should be a fulltime member of ONVIF and quoted models should be listed on official website of ONVIF. The CCTV OEM should not be suspended/ blacklisted by ONVIF.	OEM declaration on Letterhead supported by valid certificates (valid as on technical bid opening date) / reference documents.
5	The OEM of CCTV component should be CMMI Level 5 or above certification.	
6	The OEM of CCTV component should have General Data Protection Regulation (GDPR) certification.	
7	<p>The OEM of CCTV component should have ISO Certifications for Quality, Environment, Security management, Health &amp; Safety Management system, etc. for manufacturing of all types of Cameras, NVR/ DVR and allied component.</p> <ul style="list-style-type: none"> <li>- ISO 9001:2015</li> <li>- ISO 14001:2015</li> <li>- ISO 27001:2013</li> <li>- ISO 45001:2018</li> <li>- ISO 27032:2012</li> </ul>	The Bidder/s shall attach the copy of the OEM's ISO Certificate along with the bid.
8	All the CCTV Component such as Camera, VMS, NVR, DVR, etc should be from same OEM for seamless integration and ease of operation. All CCTV cameras offered in this tender should be UL, CE, FCC, RoHS and BIS certified.	Declaration of OEM on Letterhead along the copies of certificates.
9	The OEM should have average Annual turnover of INR 500 Crores during the last 3 Financial Year ending 31st March 2021.	Audited balance sheet form statutory auditor
10	The OEM of CCTV component should have its office and service/ support centre in <b>WEST BENGAL</b>	Certificate of office establishment, statutory tax registration certificates such as Trade license, GST registration certificate, etc. to be provided.
11	The OEM of CCTV component should comply with "Make-in-India" policy and guidelines as laid by Government of India. The OEM of CCTV component should also comply with all subsequent guidelines and orders published by various departments of Government of India such as Department of Expenditure (Ministry of Finance), etc.	Certificate of statutory authority

12	The OEM of CCTV component should have more than 500 employees on its payroll in India. Any OEM which is apart of a larger group company but meeting the 500 employee criterion in India is also eligible. This is to ensure that OEM has made investment in India and is serious about its sustainable business continuity in India by extending long term after sales and spare support.	Declaration of HR on Letterhead and certificate of investment from statutory auditor.
13	The camera OEM should be a genuine manufacturer and should have official valid H.265 HEVC certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the licenced fee for using the genuine HEVC compression legally. The same will be checked on following official website. <a href="https://www.mpegla.com/programs/hevc/licensees/">https://www.mpegla.com/programs/hevc/licensees/</a>	Declaration of OEM on Letterhead
14	16. The OEMs should comply with the : Public Procurement (Preference to Make in India) Order 2017-Notifying CCTV/ Video Surveillance System for Security in furtherance of the Order....  Reference: (i) Department for Promotion of Industry and Internal Trade (DPIIT) Order No. P-45021/2/2017- B.E.-II dated 15.06.2017, as amended by Orders dated 28.05.2018, 29.05.2019, 04.06.2020 and 16.09.2020 (ii) Ministry of Electronics and Information Technology (MeitY) Electronic Products Notification No. W-43/4/2019-IPHW-MeitY dated 07.09.2020 and <b>Gazette Notification No. CG-DL-E-08032024-252738 Dated. March 07, 2024.</b>	Valid STQC-ER certificate for all IP cameras. (STQC-ER certificate must submit befor supply, in case STQC testing under process with Lab during tender.)

9.16 **Time Schedule:** The supply and installation work must be completed within **30 days** from the date of receipt of the purchase order.

9.17 **Validity of offer:** A bidder should spell out in the tender that it shall remain valid for a minimum period of three months from the date of opening of the tender and during this period, the bidder shall not be entitled to revoke or cancel its offer.

9.18 **After Sales Service**

(i) The name and complete address of the company in India authorized by the manufacturer, to provide after sales service for the equipment should be mentioned. The appointed authorized service provider should be holding a valid certificate from the manufacturer to this effect.

(ii) The manufacturer should give an undertaking that after the warranty period, they shall provide spares and after sale service of the equipment in India for the normal life time of the equipment.

9.19 **Place of delivery:** CIRM, University of Kalyani, Kalyani -741235.

9.20 **Payment Schedule:** Payment be made after delivery and installation of the items.

9.21 **Performance Security:**

Successful bidder should deposit Performance Security money equivalent to the 10% of the order value in the form of DD/ suitable negotiable instruments as to be decided by the University immediately after issuing purchase order from the University. Such security will be refunded after completion of the warranty period in normal case without any accrued interest. University may forfeit the Security Money in the event of the following circumstances:

- i) Selected bidder withdraws the bid before expiry of its validity but after receipt of the Purchase Order.
- ii) Selected bidder does not accept the order after issuing the same or fails to enter into a contract within validity period of offer.
- iii) Selected bidder fails to supply the items within the scheduled time as specified in the Purchase Order
- iv) If before expiry of the warranty period, the supplied items break down or do not function satisfactorily due to the cause related with the item itself or for its installation and not for any reason caused by the University Authority and the supplier denies to take the responsibility to make the supplied items in order.
- v) In case of any false submission /statement by the bidder
- vi) In case of any refusal to abide by terms and conditions or refusal to enter into a written agreement as per prefixed terms and conditions

9.22 **Quantity Changeability:** Quantity as stated in the tender document may subject to change at the time of issuing purchase order due to the fund crunch or for other valid reasons.

**9.23 Instruction Made with Item Specification:** Bidder must comply the instructions as provided with Item Specification.

**9.24 Disposal of Disputes:** In case of any dispute, the University's decision will be treated as the final and conclusive. All legal actions are subject to Kolkata jurisdiction only.

9.25 Conditional bid may be liable for rejection.

9.26 The supplied items are preferred to be manufactured in 2025. If the supplied items are older than 1 year, vender must provide 2 years' additional onsite warranty with free of cost over and above OEM onsite warranty. Under no circumstances, items manufactured in 2023 or earlier will be accepted by the University. If it is noticed by the University regarding the manufacture of the supplied items in 2023 or its earlier, University may impose a penalty to the tune of 50% or more from the Bill Amount or take any other decision as to be deemed fit by the University and vender must accept the same as the final decision from the end of the University.

**9.27 Conflict of Interest:** Not more than one tender shall be submitted by one tenderer or tenderers having relationship. Under no circumstances will father and son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable for rejection.

9.28 In case of **Tie Bid** arising after opening of price bid, University will follow the guideline as mentioned in the G.O. No. 2320-F(Y) dated 7/6/2022 issued by the Finance Department, Government of West Bengal.

#### *10. Discretion of the University:*

(i) University may take decision about non-purchase of the said item even after selection of vendor due to its fund constraints.

(ii) University may seek documents from the bidder in addition to the scanned documents sent by the mat the time of uploading technical bid for verification and evaluation of tender.

(iii) For any false/unethical/illogical/unreasonable bid, University reserves the right to cancel the bid even after opening of Price Bid.

(iv) In case of tie bid item-wise or for all the items between two or more bidders, University reserves the right to select bidder in strict observance of the existing orders of the Government of West Bengal.

(v) University reserves the right to relax any clause as stated herein above for selection of responsive vender.

11. Opening the financial bid as per schedule will BE NOTIFIED LATER ON.

Financial bid can be seen & accessed by the bidder through the NIC Portal online after opening of financial bid on line. No objections raised by any Bidder in this respect will be entertained by the University. No informal tender will be entertained in the Bid further.

12. During the scrutiny, if it comes to the notice to tender inviting authority that the credential or any other paper found incorrect/ manufactured/ fabricated, that bidder would not allowed to participate in the tender and that application will be rejected outright without any prejudice.

13. The Tender Selection Committee reserves to right to cancel the N.I.T. due to unavoidable Circumstances and no claim in this respect will be entertained.



**Annexure I****FURNISHING BASIC INFORMATION**

(To be furnished in the Company's official letter pad)

1.	<b>Name of the Bidder</b>	
2	<b>Address for Communication</b>	
3	<b>Contact Number(s)</b>	
4	<b>E-mail ID</b>	
5	<b>Trade License No.</b> (Please enclose copy of Trade License)	
6	<b>PAN(Please enclose copy of PAN Card)</b>	
7	<b>GST No.(Please enclose copy of GST)</b>	
8	<b>Do you have previous experience for supplying similar nature of Items at Educational Institute of Higher Learning</b> (Please enclose copy of Purchase order & user list, if yes)	<b>Yes/No</b> (Please put tick mark)
9	<b>Annual Turnover as per Audited P/L ACCOUNTS &amp; BALANCE SHEET</b>	<b>2021-22: Rs.....</b> <b>2022-23: Rs.....</b> <b>2023-24: Rs.....</b> <b>Average Annual Turnover: Rs.....</b>
10	<b>Status of the bidder(Please enclose copy authenticating your status)</b>	<b>Manufacturer/Dealer/Distributor/Selling Agent/Stockiest</b> (Please put tick mark)

I hereby declare that the above information is true and correct to the best of my knowledge and belief. In case of any false/wrong/misleading information, I shall be bound to take the decision taken by the University.

**Signature of the Bidder**  
(With Seal)

**Annexure II**  
**APPLICATION FOR TENDER**

(To be furnished in the Company's official letter pad with full address and contact no, E mail address etc)

To  
The System-in-Charge  
CIRM  
University of Kalyani,  
Kalyani-741235,  
Nadia, West Bengal

Sub: NIT for the **Supply and Installation of CCTV System for the Girls' Hostel (Research Scholars), University of Kalyani.**

Ref: - **KU/NIET/CCTV/2025-26/01** dated: 03/12/2025

Sir,

Having examined the pre-qualification & other documents published in the N.I.T, I/we hereby submit all the necessary information and relevant documents for evaluation:

1. That the application is made by me / us on behalf of ..... in the capacity..... duly authorized to submit the offer. The authorization letter from the Company is attached in Annexure II.
2. We accept the terms and conditions as laid down in the tender document vide **Clause 9** and declare that we shall abide by it throughout the tender period including its extensions, if any.
3. We have gone through the Tender Document thoroughly and quoted the tendered items keeping in mind all sorts of information as furnished in the tender document including Corrigendum/Addendum as published from time to time
4. We are offering rate for the following item /items with manufacturing capacity and assured supply to the University of Kalyani

Sl. No.	Description of Items	Make	Brand Name & Model No.	Warranty Period	Offer Validity	Mode of Transport (AIR/RAIL WAY/SHIP/ ROAD)	Type of Delivery(C IP Kolkata/F OB Kolkata/D Delivery)
1							
2							
3							
4							
5							
6							
7							
8							

5. In the event of being selected, I will make the supply within the stipulated period excepting the condition which is beyond our control.

Date: -

Signature of applicant including title and capacity in which application is made.

Contact no:

E-mail address:

**Annexure III**

(Authorization letter in favour of the applicant (other than Managing Director/ Proprietor/Partner)  
from the competent authority.)

**FORMAT**

(To be furnished in the Company's official letter pad with full address and contact no, E mail  
Address etc)

**(TO WHOM IT MAY CONCERN)**

This is to certify that Mr..... (Name),  
Employee of this Organisation as .....(Official Designation) is  
Hereby authorised to submit tender online, Vide NIT No .....,  
Dated ..... on behalf of the Organisation.

Signature of the competent authority with Seal

.....

(Signature of the Authorised Person)

Signature of Mr.....

..... is hereby attested.

Signature of the competent authority with Seal

**ANNEXURE IV**

(Affidavit Proforma)

(To be furnished in Non – Judicial Stamp paper  
of appropriate value duly notarized)

I, Sri/Smt.....

The Managing Director/Proprietor (etc.) of the Firm.  
..... (Name of the firm)

At (address).....

Do hereby solemnly affirm and declare as follows:

1. That I have not ever been convicted of any offence making myself liable to be disqualified to supply of Chemicals / Equipments/other items to any Govt. or Govt. undertaking Organization /Institution in the State of West Bengal or other State or States.
2. That no case is pending against me or against my firm in any criminal court of law to supply of Chemicals, Lab. Chemicals & Laboratory Equipments and other items to the Govt. or Govt. undertaking Organization / Institution in the State of West Bengal or other State or States (If any case is pending, state the details).
3. That, I also declare that if any information subsequently found incorrect or false will it automatically render the tender submitted by me cancelled and make me liable for penal/legal action as per law of the country.
4. That my concern has not yet been declared bankrupt by any banking or money lending agency duly licensed by RBI nor has it been considered doubtful by any Government concern so far as the solvency of the organisation is concerned.
5. That I do further affirm that the statements made by me in this tender are true to the best of my knowledge and belief and all the documents attached are genuine & correct.

Deponent(s).

**ANNEXURE V**

**DECLARATION ON NIT**

*(To be typed in company letter pad, scanned and uploaded)*

I, the undersigned, do hereby declare that in respect of Tender Ref. No. **KU/NIET/CCTV/2025-26/01** dated: 03/12/2025

- On behalf of my organization, I will comply all the formalities that are required to be complied as per NIT and I will observe all clauses of the NIT (including Terms & conditions).
- In case of any non-observance of any clause(s) of NIT, my organization will be bound to follow the decisions taken by the University of Kalyani for taking decision related with the tender for which the said NIT was uploaded.

---

Full signature of the Person  
(Designation with Seal)

Date:

Place:

**ANNEXURE VI**  
**TECHNICAL COMPLIANCE STATEMENT**  
*(To be typed in company letter pad, scanned and uploaded)*

**Tender Ref. No. KU/NIET/CCTV/2025-26/01 dated: 03/12/2025**

Specification for 32ch NVR			
Specifications	Requirement	Compliance	Remarks, if any
IP Camera Input Channel	32		
Operating System	Embedded LINUX		
Network Bandwidth	Up to 384 Mbps incoming, 384 Mbps recording and 384 Mbps outgoing		
Decoding Capability	2 Channel 32 MP@25 fps, 2 Channel 24 MP@25 fps, 4 Channel 16 MP@30 fps, 5 Channel 12 MP@30 fps, 8 Channel 8 MP@30 fps, 10 Channel 6 MP@30 fps, 12 Channel 5 MP@30 fps, 16 Channel 4 MP@30 fps, 32 Channel 1080p@30 fps		
Video Compression	H.265+, H.265, H.264+, H.264		
Smart Function	Face detection, Face recognition, Perimeter protection		
Perimeter Protection	Up to 4 Channel		
Face Recognition	At Least 2 Channel		
Face Detection	At Least 2 Channel		
Resolution	32 MP, 24 MP, 16 MP, 12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 2MP, 720p, 960p, D1, CIF, QCIF		
Video Display Split	Main screen: 1/4/8/9/16/25/36; Sub screen: 1/4/8/9/16		
Video Output	2-channel VGA, 2-channel HDMI video output. Heterogeneous video source output for HDMI and VGA		
HDD Support	4 SATA ports, Up to 20 TB Per slot		
Simultaneous Playback	Up to 16 Channels		
Record Mode	General, Motion detection, Intelligent, Alarm		
Playback Mode	Instant playback, General playback, Event playback		
Smart Mobile Phone	iPhone, iPad, Android Phone		
Browser	Chrome, IE, Edge		
Interface	3 USB , 1 RS232, 1 RS485		
Audio In	1 channel		

Audio Out	1 channel		
Audio Compression	G.711a; G.726;PCM, AAC		
Alarm I/O	16/6 channel In/Out		
Ethernet	2 No. of RJ-45 (10/100Base-T)		
Protocols	HTTP, HTTPS, TCP/IP, IPv4, UDP, NTP, DHCP, DNS, SMTP, UPnP, DDNS, Alarm Server, Multicast, P2P, Auto Registration, iSCSI; ONVIF 21.12(Profile T; Profile S; Profile G)		
Operating Temperature	-10 °C to +50 °C		
Operating Humidity	10%–93% (RH)		
Power Source	12 VDC, 4Amp		
Certification	CE,FCC,BIS, ROHS		

#### Specification for 4MP Fixed Lens Dome Camera

Specifications	Requirement	Compliance	Remarks, if any
Image Sensor	1/2.7" 4 Megapixel Progressive Scan CMOS		
Minimum Illumination	0.003 Lux/F1.4		
Effective Pixels	2688(H) x 1520(V)		
Shutter Speed	Auto/Manual, 1/3 s~1/100000s		
White Balance	Auto, Manual, Natural, Regional Custome, Street Lamp, outdoor		
Lens	3.6 mm		
RAM &ROM	128 MB and 128 MB or better		
Iris Control	Fixed		
Gain Control (AGC)	Auto/Manual		
Max. Aperture	F1.4		
S/N Ratio	>58 dB		
Video Compression	H.265+/H.265/H.264		
Light Compensation	BLC, HLC		
WDR	120 dB		
Video Streaming	Quad Steam supported; Main stream : 4 MP @20 fps; Second Stream: D1 @25 fps; Third stream: D1 @25 fps; Fourth Stream: D1 @1fps		
Mirror	Yes		
Resolution	4MP (2688 × 1520); 3MP (2304 × 1296); 1080P (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)		
Motion detection	Up to 4 Zone		
Audio Input / Output	1 Channel/1 Channel		
Built in Mic	Yes		
Audio Compression	G.711a/ G.711Mu/ AAC/ G.726		
Alarm IN/Out	1 Channel /1 Channel		
Bit Rate	3 Kbps–6144 Kbps for H.264 and H.265		
Protocol	IPv4; IPv6; HTTP; HTTPS, TCP/IP; UDP; RTP;		

	RTSPS; RTCP; SMTP; SFTP; DHCP; DNS; NTP; ICMP; NFS; PPPoE; SSL; SNMP; ONVIF (Profile S/Profile G/Profile T); Unicast, Multicast		
Smart Detection	Tripwire, Intrusion		
Ethernet	RJ-45 (10/100Base-T)		
User/Host	6		
IR	IR Range of 50 Mtrs		
Warm Light	Up to 30 meter		
Micro SD	Micro SD Card, Max 512GB or better		
Operating Temperature	-30°C to +60°C		
Humidity	Less than 95% RH or better		
Power Source	DC12V, PoE (802.3af)		
Weatherproof Standard	IP67, IK10		
Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
Certification	CE, FCC, BIS, ROHS		

#### Specification for 4MP Fixed Lens Bullet Camera

Specifications	Requirement	Compliance	Remarks, if any
Image Sensor	1/2.7" 4 Megapixel Progressive Scan CMOS		
Minimum Illumination	0.003 Lux/F1.4		
Effective Pixels	2688(H) x 1520(V)		
Shutter Speed	Auto/Manual, 1/3 s~1/100000s		
White Balance	Auto, Manual, Natural, Regional Custome, Street Lamp, outdoor		
Lens	3.6 mm		
RAM &ROM	128 MB and 128 MB or better		
Iris Control	Fixed		
Gain Control (AGC)	Auto/Manual		
Max. Aperture	F1.4		
S/N Ratio	>58 dB		
Video Compression	H.265+/H.265/H.264		
Light Compensation	BLC, HLC		
WDR	120 dB		
Video Streaming	Quad Steam supported; Main stream : 4 MP @25 fps; Second Stream: 720p @25 fps; Third stream: D1 @25 fps; Fourth Stream: D1 @1fps		
Mirror	Yes		
Resolution	4MP (2688 × 1520); 3MP (2304 × 1296); 1080P (1920 × 1080); 1.3MP (1280 × 960); 720P (1280 × 720); D1 (704 × 576); VGA (640		



	× 480); CIF (352 × 288)		
Motion detection	Up to 4 Zone		
Privacy Masking	Up to 4 area		
Audio Input / Output	1 Channel/1 Channel		
Built in Mic	Yes		
Audio Compression	G.711a/ G.711Mu/ AAC/ G.726		
Alarm IN/Out	1 Channel /1 Channel		
Bit Rate	3 Kbps–6144 Kbps for H.264 and H.265		
Protocol	IPv4; IPv6; HTTP; HTTPS, TCP/IP; UDP; RTP; RTSPS; RTCP; SMTP; SFTP; DHCP; DNS; NTP; ICMP; NFS; PPPoE; SSL; SNMP; ONVIF (Profile S/Profile G/ Profile T); Unicast, Multicast		
Smart Detection	Tripwire, Intrusion, Classification of Human and Vehicle		
Ethernet	RJ-45 (10/100Base-T)		
User/Host	6		
IR	IR Range of 50 Mtrs		
Warm Light	Up to 30 meter		
Micro SD	Micro SD Card, Max 512GB or better		
Operating Temperature	-30°C to +60°C		
Humidity	Less than 95% RH or better		
Power Source	DC12V, PoE (802.3af)		
Weatherproof Standard	IP67		
Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
Certification	CE, FCC, BIS, ROHS		

#### Specification for 24Port POE Switch

Specifications	Requirement	Compliance	Remarks, if any
Interface	Should have minimum 24 x 1G base-T PoE+ ports with 2 x 1G Base-X SFP ports, could be 1U rack mountable, rack mount kit must be available		
Physical	Should have the followings or better: 800MHz ARM A55 Single Core CPU, 512MB RAM, 64MB FLASH, IEEE 802.1Q VLAN Tagging, IEEE 802.3ad Trunking (LACP), IEEE 802.1AB LLDP, IEEE 802.3az Energy Efficient Ethernet (EEE), Auto-voice VLAN, IEEE 802.1Q tag vlan, minimum 256 vlans, IEEE 802.1p (Class of Service), DSCP - L3 based QoS, Port -based ingress/egress rate limiting, 190 Watt PoE budget or higher.		

Performance	Must have or better: Packet buffer memory- 1.5 MB, Bandwidth: 52 Gbps, Priority queues: 8, Priority queuing Weighted Round Robin, MAC address database size -16K, MPPS:- 38.6 or better, Multicast groups: 8K, Number of DHCP snooping bindings: 256, Access Control Lists- 100, Jumbo frame support: Up to 10K packet size, MTBF- 17,84,600 hours or more, Acoustic noise level @ 25°C (dBA): 26.1 dBA		
L2 Service	Should support: Broadcast, multicast, unknown unicast storm control, IEEE 802.1D, IEEE 802.1W, IEEE 802.1S, IGMP snooping (v1, v2 and v3), MLD snooping support (v1 and v2), IGMP snooping queries, Block unknown multicast, MVR etc.		
L3 Service	Should support DHCP client, DHCP snooping, Host ARP table		
Security	Must have SNMP v1, v2c, v3, RMON group 1,2,3,9, IEEE 802.1x, Guest Vlan, MAC-based .1x, RADIUS accounting, IP-based ACLs (IPv4 and IPv6), MAC-based ACLs, TCP/UDP-based ACLs, MAC lockdown, MAC lockdown by the number of MACs, IEEE 802.1x RADIUS port access authentication, Port-based security by locked MAC addresses, Broadcast, multicast, unknown unicast storm control, DoS attacks prevention, Dynamic ARP inspection etc.		
QoS	Should have: Port-based rate limiting - Egress only, Port-based QoS, Support for IPv6 fields, DiffServ, IPv4 and v6 DSCP, IPv4 and IPv6 ToS, Weighted Round Robin (WRR), Destination MAC and IP, TCP/UDP-based, Strict priority queue technology, Auto-VoIP VLAN / Auto-Voice VLAN - Yes, based on OUI bytes (default database and user-based OUIs) in the phone source MAC address, Auto-VoIP, Auto-Voice Vlan, Auto-Video Vlan etc.		
Management	Must have the following features: Password management, Configurable management vlan, Web-based graphical user interface (GUI), Dual software (firmware) image, Cable test utility, SSL/HTTPS Web-based access (version): Yes (v3), TLS Web-based access (version): Yes (v1.0), File transfers (uploads, downloads): TFTP/HTTP, HTTP upload/download (firmware)		
Led	Must have: Per port Speed, Link, Activity		
Power Consumption	Should comply with the followings: Worst case, all ports used, line-rate traffic :- <than		

	21Watts		
Environment	Must have or better: Operating temperature : 0° to 50°C (32° to 122°F), Operating Humidity (relative) : 95% maximum relative humidity (RH), non-condensing		
Certification	Must have: CE, FCC Class A, RCM, ICES Class A, VCCI, KC, BSMI, MTCTE from TEC, CB, CSA		
Warranty	Lifetime Hardware replacement warranty, Lifetime free latest firmware support, Replacement with New Product Only No refurbished Products		

#### Specification for Cat6 UTP Cable

Feature	Requirement	Compliance	Remarks
Type	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/ TIA/ EIA-568 - C. 2. Additional Transmission Performance Specifications for 4- pair Category 6 cable should comply with ultrahigh speed data networks such as Gigabit Ethernet (1000 BaseT and 1000 Base-TX).		
Gauge	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.		
Jacket material	Jacket material should be FR- PVC		
Mechanical Characteristics	Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation. Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted. Conductor Solid Copper Conductor Diameter $0.56 \pm 0.005$ mm ( 23 AWG) Insulator Polyolefin Outer Diameter $6.0 \pm 0.4$ mm Max. Temperature 75 °C		
ROHS/ ELV	Compliant		
ETL	Cable Should be tested @700 MHz by ETL / Intertek. Certificate 5 need to submit along with bid		

#### Specification for 32 INCHES SMART ANDROID PROFESSIONAL DISPLAY UNIT

Feature	Requirement		Compliance	Remarks
DISPLAY PANEL	SCREEN SIZE	32 Inches		
	ASPECT RATIO	16:09		
	RESOLUTION	(1366*768)		
	DUTY CYCLE	24x7		
	BRIGHTNESS	350 nits		
	PANEL TECHNOLOGY	IPS (In Plane Switching)		

	ORIENTATION	Portrait and Landscape		
	VIEWING ANGLE	178° : 178°		
CONNECTION TERMINAL	RF IN	1*Side		
	AV IN	1mini*Side		
	USB INPUT (2.0 SUPPORT)	USB 2.0x1; USB 3.0x1		
	HDMI INPUT	2*Side		
	SPDIF OUT	YES, optical		
	RJ-45	1*Side		
	USB DEVICE SUPPORT	USB Supported HDD		
	SUPPORTED FORMATS	PNG/BMP/JPG		
	PICTURE FORMAT	H.265/H.264/H.263/MPEG1/		
	VIDEO FORMAT	MPEG2/MPEG4/AV1		
	AUDIO FORMAT	MPEG1/2/MPEG4/AC3/ EAC3/AAC/WMA/FLAC		
AUDIO	Audio Output Power (RMS)	10+10W		
	DOLBY DIGITAL	Yes , HDR 2K		
	CEC	Yes, function ready		
	SOUND OUT (ARC)	Yes		
	DOLBY AUDIO	Yes		
	HDR10	Yes, HDR10/HLG		
	BLUETOOTH VER. (TV)	Yes		
	INTERNET LINK	Yes		
	WIFI TYPE (STANDARD)	802.11a/b/g/n/ac 2.4G/5G 2T2R, Build-in		
	DEVICE LINKING SUPPORTED	HDMI-CEC		
SOC SPECIFICATIONS	CPU	Cortex-A55 x4,1.3GHz		
	GPU	Mali G31 MP2, Open GL ES3.2		
	OS & VERSION INFO	Android TV 'R' - 11.0		
	MEMORY FLASH	8GB EMMC		
	RAM	1.5GB, DDR3 2133Mhz		
	ANDROID FEATURE	Built in Google assistant and Google playstore		
	AUDIO LINK	Two-Way Bluetooth Audio Link		
	BOYD FEATURE	Built-in Chromecast		
ELECTRICAL POWER	Operating voltage	110V-240V~ at 50/60Hz		
	power Consumption	50W		
	STD by power consumption	<0.5 W		
WARRANTY	OEM WARRANTY	3 Years on site support.		
Specification for 4u Rack				

Feature	Requirement	Compliance	Remarks
Network Rack	19" 4U/ 550mmW / 500mmD Loaded Rack CKD (1XFAN 230VAC 90 cfm +1XPDU 6sockets + 1XHardware)		

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Tender Inviting Authority: CIRM , University of Kalyani

Name of Work: Supply and Installation of CCTV System for the Girls' Hostel (Research Scholars), University of Kalyani.

Contract No: KU/NIET/CCTV/2025-26/01

Name of the Bidder/								
<div>PRICE SCHEDULE</div> <div>(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )</div>								
NUMBE R #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC PRICE PER UNIT	GST PER UNIT (if any) Rs. P	Any Other Taxes/Duties/Le vies in Total Rs. P	TOTAL AMOUNT WITH TAXES	TOTAL AMOUNT In Words
1	2	4	5	13	14	17	54	55
1	Supply and Installation of CCTV System for the Girls' Hostel (Research Scholars), University of Kalyani.							
1.1	4mp IP Bullet Camera (Detail Specification as per NIT)	13.00	Pcs				0.00	INR Zero Only
1.2	4mp DOME Camera (Detail Specification as per NIT)	4.00	Pcs				0.00	INR Zero Only
1.3	32Ch NVR (Detail Specification as per NIT)	1.00	Pc				0.00	INR Zero Only
1.4	HDD 4TB Surveillance (Detail Specification as per NIT)	2.00	Pcs				0.00	INR Zero Only
1.5	32" Led TV (Detail Specification as per NIT)	1.00	Pc				0.00	INR Zero Only

1.6	<b>Rack 4U</b> (Detail Specification as per NIT)	1.00	Pc				<b>0.00</b>	INR Zero Only
1.7	<b>24 port POE switch</b> (Detail Specification as per NIT)	1.00	Pc				<b>0.00</b>	INR Zero Only
1.8	<b>Cat6 UTP Cable</b> (Detail Specification as per NIT)	4.00	Box				<b>0.00</b>	INR Zero Only
1.9	<b>RJ45 Connector</b> (Detail Specification as per NIT)	34.00	Pcs				<b>0.00</b>	INR Zero Only
2	<b>650VA UPS</b> (Detail Specification as per NIT)	1.00	Pc				<b>0.00</b>	INR Zero Only
2.1	<b>PVC Box for Camera</b> (Detail Specification as per NIT)	17.00	Pcs				<b>0.00</b>	INR Zero Only
2.2	<b>HDMI CABLE 5Mtr.</b> (Detail Specification as per NIT)	1.00	Pc				<b>0.00</b>	INR Zero Only
2.3	<b>Cat6 UTP Cable Laying with PVC pipe &amp; Accessories</b> (Detail Specification as per NIT)	1200.00	Mtr				<b>0.00</b>	INR Zero Only
3	<b>Installation Charges for Camera , NVR , Switch &amp; Rack .</b> (Detail Specification as per NIT)	1.00	Lumpsum				<b>0.00</b>	INR Zero Only
<b>Total in Figures</b>							<b>0.00</b>	INR Zero Only
<b>Total Rate in Words</b>								