

University of Kalyani



Centre for Information Resource Management

NOTICE INVITING QUOTATIONS

Ref. No. KU/Chemistry/CCTV-Sys/2024

Date: October 04, 2024

Sealed quotations are invited from reputed vendors for Supply & Installation of CCTV System in the Department of Chemistry the specification (Annexure-I) of which is furnished below:

Sl. No.	Description of Items	Quantity	Remarks(if any)
01.	Bullet Camera	2 Nos.	Sealed Quotation be submitted to the CIRM, University of Kalyani,, Kalyani, Nadia 741235,West Bengal
02.	NVR with 2TB HDD	01 Nos.	
03.	08 Port PoE Switch	01 No.	
04.	2U Network Rack	01 Nos.	
05.	650 VA UPS	01 No.	
06.	Cat-6 UTP Cables	01 Boxes.	
07.	20" HD LED Monitor	01 No.	
08.	Cable Laying ISI Mark PVC Pipe/Casing and Installation with Supporting accessories	LUMSUM	

The above notice may be downloaded from University website www.klyuniv.ac.in.

Last Date of receiving quotations: 24th October, 2024 up to 2 p.m.

Quotation must be made by the bidders in their official pad/letter head and be submitted to the following address:

Centre for Information Resource Management, Kalyani-741235, Nadia, West Bengal

Terms & Conditions:

- Bidders are requested to quote item- wise as far as possible putting rates of the items separately. Other Costs (if any) like taxes, duties, installation cost must be mentioned separately in the quotation. **Bidder must mention the make and model number of the item distinctly while quoting for any item. If possible, bidder must enclose relevant documents including brochure of the quoted item along with its technical specification with model and make. The manufacturer of the items must have National**

and International repute, having experience of selling similar items to Govt. or Govt. aided Educational Institutions and organizations. Further, the manufacturer must have satisfactory service centre base in Kolkata and its surrounding areas.

- Bidder must provide OEM Authorization Certificate.
- Tender Specific Technical Compliance with warranty Certified by OEM Letter Head as per Tender Specification.

- Bidders must submit valid documents as to Trade License, IT, GST, Manufacturing documents (if any) and credential documents for supplying similar type of items.
- In case of any dispute, University decision be taken as granted and all disputes are subject to Kolkata Jurisdiction only.
- Purchaser enjoys the right to select the vendor without assigning any reasons thereof to any bidder and lowest quotation does not ensure any guarantee for awarding purchase order.
- Purchaser may take decision for not buying any or all the items as stated hereinabove due to the fund constraint or for other issues.
- Purchaser also possesses the right to take decision on relaxation of any clause as stated above in case of need for selecting suitable and responsive vendor without compromising the quality of the items as mentioned above.

Sd/-
System-in-Charge
Centre for Information Resource Management
University of Kalyani

Annexure-I

Technical Specification of CCTV System

A. Camera Specification:

Feature	Description
Image Sensor	1/2.8" 2MP Progressive scan CMOS (0.9071 centimeters)
Minimum Illumination	0.01Lux@F2.0
Effective Pixels	1920(H)x1080(V)
Body Type	Bullet / Dome
Shutter Speed	Auto/Manual, 1/3~1/100000s
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Lens	3.6mm fixed lens (2.8mm optional)
Max Aperture	F2.0
Gain Control (AGC)	Auto/Manual
Lens Type	Fixed
S/N Ratio	>56dB
DORI Distance	3.6mm– 49.7m (Detect) 19.9m (Observe) 9.9m (Recognize) 5m (Identify) 2.8mm– 38.6m (Detect) 15.4m (Observe) 7.7m (Recognize) 3.9m (Identify)
Video Compression	Instastream/ H.265/Smart H.264+/H.264/ H.264B/ MJPEG (only supported by the sub stream)
Angle of View	3.6 mm: Horizontal: 84°; Vertical: 45°; Diagonal: 100° 2.8 mm: Horizontal: 102°; Vertical: 54°; Diagonal: 120°
Back Light Comp.	BLC/ HLC/ DWDR
Frame Rate	Main Stream: 1920 × 1080 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps) 704 × 480 (1 fps–30 fps)
Resolution	2MP (1920 × 1080); 1.3MP (1280 × 960);720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640× 480); CIF (352 × 288/352 × 240)
Motion Detection	Off / On (4 area, Rectangle)
Privacy Mask	4 areas
ICR	Auto(ICR)/Color/B/W
ROI	Yes (4 areas)
Bit Rate	H.265: 12 Kbps–6144 Kbps H.264: 32 Kbps–6144 Kbps
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; SMTP; FTP; DHCP; DNS; NTP; Multicast; ONVIF (Profile S/Profile T); CGI; P2P; Genetec
Ethernet	RJ-45 (10/100Base-T)
User Account	6 Users
Smart Phone	iPhone, iPad, Android Phone
IR Range	IR Range of 30 Mtr., Smart IR
Operating Temperature	-40°C to +60°C (-40°F to +140°F)/less than ≤ 95%
Power Source	DC12V, PoE (802.3af)
Power Consumption	1.4W (12V DC); 2.2W (PoE)

Weatherproof Standard	IP67
------------------------------	------

B. 8 Channel NVR Specification:

Feature	Description
Processor	Industrial-Grade Processor
Operating System	Embedded LINUX
IP Camera Input	8Ch.
User Interface	Web, Local GUI
AI by NVR	SMD Plus
Video Output	HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720
SMD Plus by Camera	4 channels
Video Compression	H.265, Smart H.264+, H.264, MJPEG
Encode Strategy	Instastream
Resolution	8 MP; 5 MP; 4 MP; 3 MP; 1080p; 720p;
Multi Screen Preview	1/4/8/9
Network Bandwidth	80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing
Decoding Capability	AI disabled: 1-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3- channel 4 MP@30 fps; 6-channel 1080p@30 fps AI enabled: 1-channel 8 MP@30 fps; 1- channel 5 MP@30 fps; 2-channel 4 MP@30 fps; 4-channel 1080p@30 fps
Record Mode	General, motion detection; intelligent; alarm
Audio Input	1-channel RCA
Audio Output	1-channel RCA
Smart Phone	iPhone, iPad, Android Phone
Hard Disk	2 SATA ports, up to 20TB each
General Alarm	Motion detection; camera external alarm; PIR alarm
Anomaly Alarm	Error (no disk, disk error, low space, low quota space; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline
Intelligent Alarm	Perimeter protection; SMD Plus
Recording Mode	Manual, Schedule, Continuous, MD (Motion Detection), Alarm, IVS
Browser	Chrome; IE; Safari; Edge; Firefox
Playback	Instant playback; general playback; event playback; tag playback; smart playback
Backup Mode	USB Device / Network
Interface Ports	1 HDMI, 1 VGA, 2 USB Ports(1 Rear USB2.0, 1 Front USB2.0)
Multi-channel Playback	Up to 8 channels
Ethernet	1 RJ-45 port (10/100Mbps)
Protocols	HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP; DHCP; DNS; SMTP; IP Filter; DDNS; IP Search (Supports IP camera, DVR, NVS, etc.); Auto Registration,

	ONVIF 22.12(Profile T; Profile S; Profile G); CGI; SDK
Operating Temperature	-10 °C to +55 °C (14 °F to +131 °F)
Operating Humidity	10%–93% (RH), non-condensing
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Power Supply	DC12V/4A

C. 8 Port PoE Switch Specification:

Feature	Description
PoE Standard	IEEE802.3 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.1W Spanning Tree, IEEE 802.3x flow control
Data Transmission Port	1×8 RJ45, 1×2 RJ45
Transmission Rate	10/100Mbps auto-negotiate, 10/100/1000Mbps auto-negotiate
Transmission Distance	10Base-T: ≤250m (CAT3,4,5 UTP), 100Base-TX: ≤100m (CAT3,4,5 UTP), 1000Base-T: ≤100m (CAT3,4,5 UTP)
Forwarding Mode	Store and forward
Transmission mode	Support Half/Full duplex Mode
MAC Address List	4K
Case space	1Mb
Jumbo Frame	921
Packet Forwarding Rate	4.1664Mpps@64byte
Bandwidth	5.6G
PWR (Power Indicator)	Green power
Ethernet indicator	Yellow, Per Ethernet Port
DIP switch indicator	Green per PoE port, Green per uplink port
DIP switch	100m:Standard mode - All ports can communicate with each other, 250m: Extend mode, port 1-8 are isolated from each other, transmission distance can up to 250m, and can communicate with port 9-10
Power Input	AC100~240V, 50Hz
Power Consumption	Standby: ≤3W, whole: ≤96W

D. Cat-6 UTP Cables Specification:

Feature	Description
Type	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-B.2-1 Additional Transmission Performance Specifications for 4-pair Category 6 Cabling. Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP.
	Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T and 1000 Base-TX) and beyond.
Jacket:	The cable jacket shall be LSZH and LSZH sheath should Complying to: a. Fire rating IEC 60332-1, b. Acid gas IEC 60754-2 c. Smoke density IEC 61034-2
	Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation.
Mechanical Characteristics	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±0.005mm (23 AWG) Insulator Polyolefin Outer Diameter 6.0±0.4mm Max. Temperature 60°C
ROHS/ELV	Compliant
ETL Test Report @700 MHz	Cable should have test by ETL / Intertel @800

E. Wall Mount Rack Specification:

2U Wall Mount Network Rack	Type: 2U Wall Mount Network Rack Cooling: Roof mounted fan housing units with exhaust axial type fans of 2U rack mounted fan trays with 2/4 fan capacity to take care of heat pockets at specific locations. These units can be mounted anywhere all along the height of the cabinet. Power Module : These are required to mount rack mount equipment's onto the cabinet
-----------------------------------	--

F. 650VA UPS Specification:

650VA UPS with all accessories with 2 years warranty
650VA Line Interactive Micro Processor Controlled UPS
Input Volt. Range :140-300V (Full Load)
Nominal Input Freq: 50Hz
Output Volt. Range :230V +/- 10%(Batt. Mode)
Output Freq. Range :50Hz +/- 1%
Receptacle: 3 x Indian Socket
Internal Batt: 7AH X1
90% Batt. Recharge : 4-6Hrs.
Cold Start : Require
Operating Temp: 0-40°C
LED Indicator Require
Surge Protection : Inbuilt
ISO 9001, ISO14001,ISO45001 :2018,

Sd/-
System-in-Charge
Centre for Information Resource Management
University of Kalyani