

# EDUCATIONAL MULTIMEDIA RESEARCH CENTRE University of Kashmir



# e-Tender for IP Based CCTV System

For and on behalf of EMMRC, University of Kashmir, the Director, Educational Multimedia Research Centre, University of Kashmir, Hazratbal, Srinagar, invites GeM bid **for SITC of IP Based CCTV System,** from OEM authorized bidders. The registered bidders can submit their bids by or before 1-12-2025 upto 5 PM.

#### Terms & Conditions:

- 1. The bidders shall inspect and examine the site and shall satisfy himself before submitting this tender, no extra shall be payable for non-awareness of the site/equipment condition and constraints thereof. **The work includes dismantling of existing analog CCTV setup** including cabling, conduits etc.
- 2. The bidder must mention Make/Model clearly in the bid and compliance with this tender document.
- 3. The Centre has regulated power supply, bidders need not to quote UPS/stabilizer, however they have to carry power cabling/points wherever required.
- 4. Proposal should be for a complete system from OEM registered & authorised suppliers only. OEM Authorization certificate MAF need to be submitted.
- 5. The rates quoted by the bidder shall be firm and final and inclusive of all taxes and duties. Nothing shall be paid extra. No escalation of whatsoever nature shall be payable.
- 6. The copy of the proof for having carried out similar works for the last three financial years in the business of dealing sales/service of CCTV Cameras of Branded make should be enclosed with the tender.
- 7. If any accident takes place at the site during the routine and preventive maintenance, it will be the responsibility of the contractor to indemnify the department of any losses arising out of such accidents/ losses theft etc.
- 8. On acceptance of tender and its communication to the successful bidder, the same shall be binding upon the party.
- 9. EMMRC reserves the right to either increase or decrease the quantity of any or all the items. Also, EMMRC reserves the right to alter/modify the scope of work mentioned in this RFP document at any state of the bidding process and contract as per the requirements on site.
- 10. EMMRC reserves the right to reject any tender in part or in full, which in the sole opinion of the Centre, does not meet the Centre's interest.
- 11. EMMRC also reserves the right to negotiate with potential bidder/s so that its best interest to fulfill the need of project is served.
- 12. All Camera's and NVR should be of Single OEM. The CCTV OEM should have service/

support Centre in Srinagar, J&K.

- 13. CCTV Camera OEM should be member of ONVIF and quoted models should be listed on ONVIF official website (All the certifications & Credentials should be valid on the date of technical evaluation). The CCTV OEM should not be suspended/ blacklisted by ONVIF. NO malicious code is present in the hardware and software for which self-certification from OEM is required. MAC address of cameras and NVR must be in registered in the name of OEM. To ensure no third party involvement.
- 14. In compliance with Ministry of Electronics and Information Technology (MeitY), Bidder has to ensure that OEMs must submit STQC Certificate with ER of the offered CCTV Camera by STQC.
- 15. All the items supplied must confirm to Bureau of Indian Standards to withstand the adverse weather conditions of this region. All main items supplied viz. CCTV Camera, Network Video Recorder, PoE Switch, Passive Networking Components should be 'BIS' complied.
- 16. Bidders are requested to quote their best possible prices with minimum profit margin & offer special discount on quoted price, as the setup is strictly required for educational purpose only. The tenderer should certify the completeness of the system in all respect.

#### **Evaluation Criteria:**

The broad guidelines for evaluation of Bids/Quotation will be as follows:

- i. Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the Bid/ATC, both technically and commercially.
- ii. The technical bids forwarded by the Bidders will be evaluated by the Buyer with reference to the technical specifications of the equipment/items/services and terms & conditions as mentioned in the Bid. The compliance of Technical Bids would clear the technical evaluation.
- iii. The Lowest Bid will be decided upon the lowest price of overall contract value quoted by the particular Bidder including GST
- iv. The Lowest Acceptable Bid will be considered further for placement of contract/ services after complete clarification and price negotiations as decided by the Buyer.

#### Location & Bill of Materiel

S.No	Area	DOME	BULLET	
		CAMERA	CAMERA	
1	PCR	1		
2	Ground Floor Corridor	2		
3	First Floor Corridor	2		
4	Studio	1		
5	Auditorium	2		
6	Electrical Room	1		
7	Library	1		
8	CAR Room	1		
9	Engineering Store Room	1		
10	Entrance		1	
11	Front Side of the Building		1	
12	Left Side of the Building		1	
13	Back yard		1	
14	Editing Suites (Working Areas)	4		
15	Multimedia Lab	1		
16	DTH Lab	1		
17	NVR Location	Central App	Central Apparatus Room	
_	TOTAL	18	4	

S. No.	Description	Qty	UoM
1	Min. 4MP IP CCTV Dome Camera	18	Nos
2	Min. 4MP IP CCTV Bullet Camera	4	Nos
3	3 32 Channel 4K Network Video Recorder with 2 TB SATA		Nos
4	8 Ports 10/100/1000 MBPS PoE Switch with 2 uplink Ports	3	Nos
5	CAT6 LSZH Patch Cord - 1Mtr	22	Nos
6	Patch Panel 24 Port	1	Nos
7	CAT6 UTP Cable roll of 305 Mtrs	2	Nos
8	25mm PVC Conduit	50	Mtrs
9	4x4 camera box for CCTV	22	Nos
10	32A SP MCB	6	No.'s
11	Rack Mount PDU (5/6 Amp Sockets with Switch)	1	No.'s
12	Server Connection Module	1	No.'s

# **Fechnical Specifications:**

IMP I	MP IR Network Dome Camera		
3 no.	Feature	Specification	
	Image Sensor	Minimum 1/2.9" 4MP PS CMOS Image Sensor or better	
2	Effective Pixels	2688(H) × 1520(V)	
}	Minimum Illumination	0.03 lux@F2.0 (Color, 30 IRE), 0.003 lux@F2.0 (B/W, 30	
		IRE), 0 lux (IR on)	
<u> </u>	Shutter Speed	Auto/Manual 1/3 s–1/100,000 s	
5	RAM	128 MB	
5	ROM	128 MB	
7	Max. Aperture	F2.0	
3	Lens Mount	M12	
)	Lens	3.6mm fixed or better	
10	Video Compression	H.265, H.264	
<u>l 1</u>	S/N Ratio	50 to 60dB	
<u>l2</u>	IR	IR Range of 30 Mtr.	
<u>13</u>	IR Number	1 IR LED	
<u> 14</u>	Audio	Built-in Mic	
15	Stream Capability	Triple stream	
16	Noise Reduction	3D NR	
<u> 17 </u>	Motion detection	Support	
18	Privacy Mask	Support	
<u> 19</u>	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC	
<u> </u>	Human Body Detection	Support the classification and accurate detection of human	
21	Protocol	SFTP, IPv6, IPv4, DNS,RTCP, NTP, RTP, HTTP, HTTPS, SNMP V3, TLS Version 1.2, TCP/IP, PPPoE, NFS, UDP, ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), unicast, multicast	
22	SDK and API	Support	
23	Power Source	12 VDC/ PoE (802.3af)	
24	Weatherproof Standard	IP67	
25	Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)	
26	Operating Humidity	≤95%(RH), non-condensing	
27	Casing	Metal + Plastic	
28	Certificate	STQC, ISO 9001, ISO 14001, ISO 27001, CMMI 5, GDPR and Cyber Security	
IMP N	 Network IR Bullet Camera		
3 no.	Feature	Specification	
L	Image Sensor	Minimum 1/2.9" 4MP PS CMOS Image Sensor or better	
2	Effective Pixels	2688(H) × 1520(V)	
3	Minimum Illumination	0.03 lux@F2.0 (Color, 30 IRE), 0.003 lux@F2.0 (B/W, 30 IRE), 0 lux (IR on)	
1	Shutter Speed	Auto/Manual 1/3 s-1/100,000 s	
5	White Balance	Auto, Natural, Street lamp, Outdoor, Manual, Regional custom	

5	RAM	128 MB
7	ROM	128 MB
3	Lens Type	Fixed-focal
)	Lens Mount	M12
0	Lens	3.6mm fixed or better
1	Video Compression	H.265, H.264
12	S/N Ratio	>50 to 60dB
13	IR	IR Range of 30 Mtr.
4	IR Number	1 IR LED
15	Audio	Built-in Mic
16	Noise Reduction	3D NR
7	Motion detection	Support
18	Privacy Mask	Support
[9	ROI	Support
30	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC
21	Human Body Detection	Support the classification and accurate detection of
		human
22	Protocol	SFTP, IPv6, IPv4, DNS,RTCP, NTP, RTP, HTTP, HTTPS,
		SNMP V3, TLS Version 1.2, TCP/IP, PPPoE,NFS, UDP,
		ICMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S,
		Profile G, Profile T), unicast, multicast
23	SDK and API	Support
24	Power Source	12 VDC/ PoE (802.3af)
25	Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
26	Operating Humidity	≤95%(RH), non-condensing
27	Casing	Metal + Plastic
28	Certificate	STQC, ISO 9001, ISO 14001, ISO 27001, CMMI 5, GDPR
		and Cyber Security
10.01	TT OCE + 4TZ N-4	D1

#### 32 Ch. H.265 + 4K Network Video Recorder

3r no.	Feature	Specification
	Processor	Quad-core embedded processor
5	IP Camera Input	32 channel
3	Operating System	Embedded LINUX
1	Two-way Talk	1 Channel Input, 2 Channel Output, RCA
5	Video Output	HDMI as well as VGA
5	Compression	Smart H.265+/H.265/Smart H.264+/H.264
7	Video Resolution	HDMI1: 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 VGA1: 1920 × 1080 , 1280 × 1024, 1280 × 720 ; HDMI2/VGA2: 1920 × 1080
3	Video Recording	Max 350Mbps
)	Video Display Split	1st Screen: 1/4/8/9/16/25/36, 2nd Screen: 1/4/8/9/16
10	Video Loss	Supports
l 1	Alarm Input	10 channel
12	Alarm Output	2 channel
13	Hard Disk	4 SATA ports, up to 10TB Each, 1 eSATA port, 2TB SATA

record: 10~300 sec  19 Ethernet 2 RJ-45 Ports (10/100/1000Mbps) Independent or Joi Working  20 Protocols HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI			
Interface Ports  3 USB Ports (2 Rear USB 3.0, 1 Front USB 2.0), 1 RS232, 1 RS485  17 Max User Account  128 users  1~120 min (default: 60 min), Pre-record: 1~30 sec, Pos record: 10~300 sec  19 Ethernet  2 RJ-45 Ports (10/100/1000Mbps) Independent or Joi Working  20 Protocols  HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	14	Trigger Events	
RS232, 1 RS485    Max User Account   128 users	15	Backup Mode	USB Device/Network/eSATA Device
Record Interval  1~120 min (default: 60 min), Pre-record: 1~30 sec, Pos record: 10~300 sec  19 Ethernet  2 RJ-45 Ports (10/100/1000Mbps) Independent or Joi Working  20 Protocols  HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	16	Interface Ports	
record: 10~300 sec  19 Ethernet 2 RJ-45 Ports (10/100/1000Mbps) Independent or Joi Working  20 Protocols HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	7	Max User Account	128 users
Working  Protocols  HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	18	Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, ONVIF 2.4, SDK, CGI	[9	Ethernet	2 RJ-45 Ports (10/100/1000Mbps) Independent or Joint Working
Power Consumption <16.7W	50	Protocols	NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm
10 ii ci conodinption	21	Power Consumption	<16.7W
22 Working Temp -10 ~+55°C / 10~90%RH / 86~106kpa	22	Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa
certificates ISO 9001, ISO 14001, ISO 27001, CMMI 5, BIS, GDPR and Cyber Security	23	certificates	ISO 9001, ISO 14001, ISO 27001, CMMI 5, BIS, GDPR and Cyber Security

### 3 Ports PoE Switch

3r.	Feature	Specification
10.		
	Uplink Ports	8 x 1000Mbps RJ45 ports
2	Network Standard	IEEE802.3i/802.3u/802.3x/802.3af/802.3ab/ IEEE 802
3	Switch Capacity	24Gbps Full duplex
1	Packet Forwarding Rate	1.488Mpps/port
5	PoE Ports	8, 1000Mbps; RJ45 ports; Max. 30W Output of Single PoE Port
5	Network Ports	12 port
7	Transmission Distance	0-100m/1000Mbps or Port 7-8 Max. 250m/10Mbps via Cat.5e
3	MAC Address List	2k
)	PoE Feature	All ports support MDI/MDI
0	PoE Standard	IEEE802.3af, IEEE802.3at
l 1	PoE Power Budget	96W
12	Ethernet Port Light	Green light off: Link is disconnected Green light on: Link is connected Green light flash: Data Transmitting
[3	Surge Protection	Common mode/RJ45 port: 4KV Differential mode/RJ45 port: 2KV Common mode/Power board: 2K Differential mode/Power board: 2KV
4	Power Source	Input: 100-240V AC, 50/60Hz, Bult-in Power Supply
15	Operating Temperature	-10°C ~50°C
16	Power Consumption	<5W
17	Humidity	10%-95%, non-condensing
30+6	Cable	

### Cat6 Cable

Br.	Feature	Specification
10.		

L	Conduct Type	Solid Bare Electrolytic Grade Copper
5	Nominal Conductor	24 AWG
	Diameter	
3	Insulation	Polyethylene (HDPE)
<u> </u>	No. of Pair	4, Each pair Twisted
5	Pairing	Twisted into Two core
5	Outer Sheath	LDPE
7	Inner Sheath	PVC
3	Approximate OD	$7.0 \pm 0.50$ mm
)	Rip Cord	Yes
10	Cross Filler	HDPE
l 1	Sequential Marking	At Every Meter
l2	Resistance Unbalance	5% Max
l3	Conductor Resistance	93.5Ω/1000 Mtr@20°C Max
<u>l</u> 4	Mutual Capacitance	5.6nf/100Mtr. Max
15	Packing	305 Mtrs
16	Temperature Rating	-20 to +60°C
17	Installation	0 to 50°C
	Temperature	
18	NVP	69%
19	Impedance	100±15% Ω
20	Worst Cable Skew	45ns/ 100mtr.

# PVC pipe

	Dimensions:	25 mm
2	Nominal	25
3	Outside	25
1	Tolerance on OD	-0.3
5	Inside Diameter(Min) in mm	21.4

#### Power Distribution Unit

- > Upto 14 Individually Fused IEC Outputs
- ➤ Micro-controller based smart operation
- ➤ Input Power 220V 50Hz with 2.5m prewired cable
- ➤ 19" Rackmount
- > 1 RU Automatic
- > Input Changeover
- ➤ Individually Fused IEC x 14,
- > 5A load each (max),
- > 1A standard fuse

#### Server Connection Module

- Provides server interface module to connect NVR with KVM Switch
- ➤ PORTS: 1 RJ-45 female port, 1 USB 2.0 Type A port, and 1 VGA port
- > KVM P/N LRA 185KMM-001 Model No. CMN: 1099-002 Compatibility Server Interface Model MPUIQ-VMCHS

S. No.	Scope of Work	
1	Dismantling of existing CCTV camera setup	
2	Installation & Configuration of IP CCTV Cameras	
3	Installation & Configuration of Network Video Recorder, switches through Patch Panel	
4	Installation & Dressing of NVR / Network Racks, CAT6 patch cords, Camera boxes	
5	Laying of CAT6 cable, PVC conduit/ Channels, through indoor/outdoor pipe & accessories etc.	
6	Installation and Termination of CAT6 Information Outlet, Jack Panels	
7	Training, Labeling & documentation for operation & maintenance	
	The above items should be delivered within 24 days of the issue of the work order	

Further details can be obtained from the office of the undersigned on any working day.

Sd/-Dr. Salima Jan **Director** 

No.2/EMMRC/CCTV/KU/2025-26 Dated: 13-11-2025

#### Copy to:

- Public Relation Officer, University of Kashmir, for wide publicity through press;
  Director, IT&SS, with the request to please put it on the University website;
  EMMRC website;

- **❖** Master/Office file