

# NALANDA OPEN UNIVERSITY

Bargaon, Nalanda 803111

## TENDER NOTICE

**Tender No:** 06/ 2023

**Date:** 05/09/2023

**Name of Work:** Installation of CCTV Cameras at Nalanda Open University Campus, Bargaon, Nalanda

Nalanda Open University invites sealed tenders from eligible and qualified vendors for the installation of CCTV cameras at its campus located in Bargaon, Nalanda. The campus spans across a 10-acre area and requires a comprehensive CCTV surveillance system to ensure the safety and security of the premises.

**Scope of Work:** The scope of work includes the supply, installation, and configuration of various categories of night vision, Infrared HD, IP CCTV cameras, Network Video Recorder (NVR) systems, and associated equipment. The following types of cameras may be required:

1. Dome Cameras of 5 megapixel – specifications attached as Annexure I
2. Bullet Cameras of 5 megapixel – specifications attached as Annexure II
3. NVR - specifications attached as Annexure III
4. 08 Port POE Giga Switch - specifications attached as Annexure IV

**Submission of Tenders:** Interested vendors are required to submit their sealed tenders in accordance with the terms and conditions outlined in the tender document. The tender documents can be downloaded from [www.nou.ac.in](http://www.nou.ac.in) from 05/10/2023 to 15/10/2023 .

**Tender must be submitted on given tender form available with this tender notice on [www.nou.ac.in](http://www.nou.ac.in).**

Tender papers can be sent by registered post only to Registrar, Nalanda Open University, 3<sup>rd</sup> floor, Biscomaun Bhawan, near Gandhi Maidan, Patna-800001 within last date of submission. Tender paper received after last date will not be entertained..

### **Documents required**

The Tenderer are required to enclose the following documents failing which the tender would be rejected.

- (a) ITR for last three years.
- (b) Registration of appropriate category.
- (c) GST registration papers
- (d) Proof of work experience of similar nature of work
- (e) Aadhar card
- (f) PAN card
- (g) EMD – DD for 50000/- (refundable) in favour of Nalanda Open University, payable at Patna
- (h) Tender cost -Rs. 1000/- (non-refundable), in the form of DD in favour of Nalanda Open University, payable at Patna

Details can also be obtained on [www.nou.ac.in](http://www.nou.ac.in) under head Eligibility Criteria

**Last Date** : The last date for the submission of tenders by post is 16/10/2023 at 04.00 P.M. Tenders received after the specified date and time will not be considered.

**Pre-Bid Meeting**: A pre-bid meeting will be held on 09/10/2023 at 03.00 P.M. at the Nalanda Open University at Patna office on 3<sup>rd</sup> floor, Biscomaun Bhawan, Gandhi Maidan, Patna. All interested bidders are encouraged to attend the meeting to seek clarifications and obtain additional information about the project.

**Contact Information**: For any queries or clarifications regarding the tender, please contact:

Dr. A.N. Pandey, IT Co-ordinator,

Mob. No.: 9431260006, NOU

**Tender Opening**: Tenders will be opened on 17/10/2023 at 2.00 P.M. in the presence of the bidders who wish to attend.

Nalanda Open University reserves the right to accept or reject any or all tenders without assigning any reason. University reserves the right to distribute the work among more than one vendors. The decision of the university in this regard will be final.

**Penalty**: Work must be completed in all respect within one month of allotment of work failing which 10% amount will be deducted from the final bill. If delayed for more than 2 month this work order will automatically stand cancelled without information.

**By order of the Vice-Chancellor, NOU**

**Registrar, NOU**

# ANNEXURE - I

## 5 MP IP Bullet Camera

Specifications	Compliance (Yes/No)	Remarks
<b>Camera</b>		
Image Sensor	1 / 2.7" CMOS	
Image Size	2592×1944	
Electronic Shutter	1 s ~ 1 / 100000 s	
Iris Type	Fixed Iris	
Min. Illumination	0.0236 lux @F2.0, AGC ON; 0 lux with IR 0.0085 lux @ F1.2, AGC ON; 0 lux with IR	
Lens	3.6 mm	
Field of View	horizontal FoV:79.4°; Vertical FoV: 63.8°; Diagonal FoV: 92°	
Lens Mount	M12	
Wide Dynamic Range	Digital WDR	
BLC	Yes	
HLC	Yes	
Defog	Yes	
Digital NR	3D DNR	
Angle Adjustment	Pan: 0°~360°; Tilt:0°~80°; Rotation: 0°~360°	
<b>Image</b>		
Video Compression	H.265 / H.264	
H.265 Compression Standard	Main Profile@Level4.1 High Tier	
Resolution	5MP( 2592 × 1944), 4MP( 2592 × 1520 ), 1080P ( 1920 × 1080 ), 720P ( 1280 × 720 ), D1, CIF, 480 × 240	
Main Stream	60Hz : 5MP(1~20fps)/4MP(1~30fps)/1080P(1~30fps)/720P(1~30fps) 50Hz : 5MP(1~20fps)/4MP (1~25fps)/1080P (1~25fps)/720P(1~25fps)	
Sub Stream	60Hz :720P (1~15fps)/D1 (1~30fps)/CIF (1~30fps); 50Hz:720P (1~12fps)/D1 (1~25fps)/CIF (1~25fps)	
Third Stream	60Hz : D1/CIF/480 × 240 (1~30fps); 50Hz: D1/CIF/480 × 240 (1~25fps)	
Bit Rate	64 Kbps ~ 5 Mbps	
Bit Rate Type	VBR / CBR	
Image Settings	ROI, Saturation, Brightness, Hue, Contrast,Wide Dynamic, Sharpness, NR, etc. adjustable through client software or web browser	
ROI	Each ROI to be configured separately	
<b>Interfaces</b>		
Network	RJ 45	
Storage	Built-in micro SD card slot; up to 128GB	
Reset	Yes	

Functions			
Remote Monitoring	Web Browser/TVT NVMS2.0/NVR/mobile APP		
Online Connection	Support simultaneous monitoring for up to 3 users; Support multi-stream real time transmission		
Network Protocol	UDP, Ipv4, IPv6, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP,802.1x, UPnP, HTTP, HTTPS, QoS		
Interface Protocol	ONVIF		
Storage	Network remote storage; micro SD card storage		
Smart Alarm	Motion detection		
General Function	Watermark, IP address filtering, video mask, heartbeat, illegal login lock		
IR Distance	20~30m		
Ingress Protection	IP 67		
Others			
Power Supply	DC12V/PoE		
Power Consumption	< 5W		
Operating Environment	- 30 °C ~ 60 (-22~140°F) Humidity: less than 95% (non-condensing)		
Installation	Ceiling mounting; Wall mounting		
Certificate	BIS		
Environmental Protection	Complies with Directive EU RoHS, WEEE(2012/19/EU), Directive 94/62/EC and REACH(EC1907/2006)		

## ANNEXURE - II

### 5 MP IP Dome Camera

Specifications		Compliance (Yes/No)	Remarks
Camera			
Image Sensor	1 / 2.7" CMOS		
Image Size	2592×1944		
Electronic Shutter	1 s ~ 1 / 100000 s		
Iris Type	Fixed Iris		
Min. Illumination	0.0236 lux @F2.0, AGC ON; 0 lux with IR 0.0085 lux @ F1.2, AGC ON; 0 lux with IR		
Lens	3.6 mm		
Field of View	horizontal FoV:79.4°; Vertical FoV: 63.8°; Diagonal FoV: 92°		
Lens Mount	M12		
Wide Dynamic Range	Digital WDR		
BLC	Yes		
HLC	Yes		
Defog	Yes		
Digital NR	3D DNR		
Angle Adjustment	Pan: 0°~360°; Tilt:0°~80°; Rotation: 0°~360°		
Image			

<b>Sub Stream</b>	60Hz :720P (1~15fps)/D1 (1~30fps)/CIF (1~30fps); 50Hz:720P (1~12fps)/D1 (1~25fps)/CIF (1~25fps)		
<b>Third Stream</b>	60Hz : D1/CIF/480 × 240 (1~30fps); 50Hz: D1/CIF/480 × 240 (1~25fps)		
<b>Bit Rate</b>	64 Kbps ~ 5 Mbps		
<b>Bit Rate Type</b>	VBR / CBR		
<b>Audio Compression</b>	G711A/U		
<b>Image Settings</b>	ROI, Saturation, Brightness, Hue, Contrast,Wide Dynamic, Sharpness, NR, etc. adjustable through client software or web browser		
<b>Bit Rate</b>	64 Kbps ~ 5 Mbps		
<b>Bit Rate Type</b>	VBR / CBR		
<b>Image Settings</b>	ROI, Saturation, Brightness, Hue, Contrast,Wide Dynamic, Sharpness, NR, etc. adjustable through client software or web browser		
<b>ROI</b>	Each ROI to be configured separately		
<b>Interfaces</b>			
<b>Network</b>	RJ 45		
<b>Audio</b>	1CH Built in Mic		
<b>Storage</b>	Built-in micro SD card slot; up to 128GB		
<b>Reset</b>	Yes		
<b>Functions</b>			
<b>Remote Monitoring</b>	Web Browser/TVT NVMS2.0/NVR/mobile APP		
<b>Online Connection</b>	Support simultaneous monitoring for up to 3 users; Support multi- stream real time transmission		
<b>Network Protocol</b>	UDP, Ipv4, IPv6, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP,802.1x, UPnP, HTTP, HTTPS, QoS		
<b>Interface Protocol</b>	ONVIF		
<b>Storage</b>	Network remote storage; micro SD card storage		
<b>Smart Alarm</b>	Motion detection		
<b>General Function</b>	Watermark, IP address filtering, video mask, heartbeat, illegal login lock		
<b>IR Distance</b>	20~30m		
<b>Ingress Protection</b>	IP 67		
<b>Others</b>			
<b>Power Supply</b>	DC12V/PoE		
<b>Power Consumption</b>	< 5W		
<b>Operating Environment</b>	- 30 °C ~ 60 (-22~140°F) Humidity: less than 95% (non-condensing)		
<b>Installation</b>	Ceiling mounting; Wall mounting		
<b>Certificate</b>	BIS		
<b>Environmental Protection</b>	Complies with Directive EU RoHS, WEEE(2012/19/EU), Directive 94/62/EC and REACH(EC1907/2006)		

## ANNEXURE - III

### 32 Channel Network Video Recorder

Specifications		Compliance (Yes/No)	Remarks
<b>Video</b>			
<b>IP Video Input</b>	32CH IPC input		
<b>Incoming/Outgoing Bandwidth</b>	192Mbps / 192Mbps		
<b>IP Video Input Resolution</b>	12MP/8MP/6MP/5MP/4MP/3MP/1080P/1280 1024/960P/720P/960H/D1/CIF		
<b>Output</b>	HDMI: 3840×2160 / 1920x1080 / 1280x1024 / 1024x768		
	HDMI2 : 1920 × 1080 / 1280 × 1024 / 1024 × 768		
	VGA ×1: 1920 × 1080 / 1280 × 1024 / 1024 × 768		
	VGA and HDMI1 output the same video source		
<b>Compression</b>	H.265S/ H.265+/ H.265/ H.264		
<b>Multi-screen Display</b>	1/4/6/8/9/13/16/25/32/36		
<b>Audio</b>			
<b>Network Input</b>	32 CH IPC audio input		
<b>2-way Audio</b>	RCA × 1		
<b>Local Output</b>	RCA × 1		
<b>Compression</b>	G.711(U/A)		
<b>Record</b>			
<b>Record Stream</b>	Dual stream recording		
<b>Resolution</b>	12MP@20fps; 8MP/ 6MP/5MP/4MP/3MP/1080P/1280×1024/960P/ 720P/960H/D1/CIF@30fps(NTSC)/25fps(PAL)		
<b>Frame Rate</b>	<b>NTSC:</b> 30fps; <b>PAL:</b> 25fps		
<b>Playback</b>			
<b>Simultaneous Playback</b>	Max. 16 CH		
<b>Search</b>	Time slice / time / event / tag /smart search		
<b>Smart Search</b>	Highlighted color to display the camera record in a certain period of time, different colors refers to different record events		
<b>Function</b>	Play, pause, FF, FB, digital zoom, etc.		
<b>Decoding Capability</b>			
<b>Live View/Playback</b>	1CH 12MP/4CH 1080P		
<b>Multi-Screen Display Mode</b>			
<b>Multi-screen Display Mode</b>	Dual output mode (default mode): supports HDMI2 output, but doesn't support AI by device AI mode: HDMI2 output and 12MP video input (live view/playback) are unavailable, but 8MP video input supports		
<b>Dual Output Mode</b>	32CH (HDMI1) +4CH (HDMI2)		
<b>AI Mode</b>	24CH (HDMI1)		
<b>Alarm</b>			

Type	Manual, Sensor, Motion, Exception, Smart events, etc.		
Input	16 CH local alarm input		
Output	4 CH		
Triggering	Record, snap, preset, e-mail, etc.		
<b>Network</b>			
Interface	RJ 45 1000 Mbps × 2		
Protocol	TCP / IP, IPv4, Ipv6, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF, etc.		
Client Connection	Max. 20 users access		
<b>Storage</b>			
HDD Interface	SATA × 4, max 10T for each HDD		
E-SATA Interface	E-SATA × 1		
<b>Backup</b>			
Local Backup	U disk, USB mobile HDD		
Network Backup	Yes		
<b>Port</b>			
USB Port	USB2.0×2, USB3.0×1		
Remote Controller	Optional		
<b>Others</b>			
Power Supply	ATX 250W		
Consumption	≤ 20W ( without HDD )		
Dimensions (mm)	440×390×70 (W×D×H)		
Working Environment	-10 ~ 50°C, 10% ~ 90% humidity		
Certificate	BIS		
Environmental Protection	Directive EU RoHS, REACH and WEEE		

## ANNEXURE - IV

### 08 Port POE Giga Switch

Specifications	Compliance (Yes/No)	Remarks
<b>Features</b>		
Power Adapter Voltage	AC 110V-240V	
Consumption	150W(52V 2.88A)	
PoE Ethernet Port	1-8 port:1000Mbps	
Ethernet Port, SFP Port	Uplink port:1000Mbps, 2*1000Mbps SFP Ports	
Transmission Distance	1 - 8 Port :1000M: 0 100m / Uplink Port:0-100m	
Transmission Medium	Cat5/5e/6 standard network cable	
Network Standard	IEEE802.3/802.3u, IEEE802.3x,IEEE802.ab	
Switching Capacity	20 Gbps	
Packet Buffer Memory	1 Mbits	
Throughput	14.88Mbps	
MAC Table	2K	

Packet Forwarding rate	10Mbps:14880pps/port, 100Mbps:148800pps/port, 1000Mbps:1488000pps/port		
PoE Standard	IEEE802.3af/at		
LED Indicator	Power indicator: keep bright when connect power Network indicator : Flicker when there is data transmission		
Working temperature	0°C 55°C		
Relative Humidity	20-95%		
Storage temperature	-20°C 70°C		

## **Eligibility Criteria**

### **Eligibility Criteria**

A bidder participating in the procurement process, the following minimum & mandatory prequalification bid / eligibility criteria failing which the concerned bid shall be rejected:

S. No.	Basic Requirement	Specific Requirements	Documents Required	Bidder's Compliance (Yes/No)
01.	Bidder's Legal Entity  (Joint Venture or Consortium or Association of bidders shall not be allowed)	The bidder should be duly registered  under either the Bihar Shops & Establishments Act, 1958.  OR  A company registered under Indian Companies Act, 1956  OR  A partnership firm registered under Indian Partnership Act, 1932.	i. Company Registration Under Bihar Shop & Establishment Act with minimum 30 nos. of employee (in case of Proprietorship Firm)  ii. Registration certificate and Memorandum of Association issued by Registrar of Companies in case of a registered company and in case of another statutory or registered body, certificate of incorporation or registration issued by concerned authority. Power of attorney in favor of the person signing the bid. (in case of company registered under company Act).  Partnership Deed and valid registration certificate with the Registrar of Firms in case of Partnership Firms. Power of Attorney in favor of the partner signing the bid, authorizing him to represent all partners of the firm (in case of partnership firm)	



02.	Office Registration	The Bidder must have a registered office in Bihar.	1) Electricity Bill/Telephone bill or last 3 months- on the name of bidder, OR Copy of Rent Agreements.	
03.	Financial Net Worth	The net worth of the bidder should minimum 20 Lakhs as on 31.03.2022, should be Positive.	CA Certificate with CA's Registration Number/ Seal	
04.	The bidder must provide self –attested scanned copies.	<p>i. PAN Card</p> <p>ii. GST Registration Certificate in Bihar, and</p> <p>i. submit proof of GST return for the tax deposited amount of minimum Rs. 2 Lac as Goods and Service tax in financial year 2021-2022</p> <p>ii. ESIC &amp; EPF registration Certificate..</p> <p>Firm must have deposited the EPFO &amp; ESIC Contribution of minimum 300 man-days per month in Last 6 Month.</p>	<p>Self –attested copies of</p> <p>1) PAN Card</p> <p>2) GST Registration Certificate &amp; Payment Challan paid amount 25 lac</p> <p>4) ESI &amp; EPF registration Certificate &amp; EPFO &amp; ESIC Challan of last 6 months.</p>	
05.	ISO Registration	ISO 9001:2015 Registration Certificate.	Copy of Valid ISO Certificate.	
06.	Undertaking	(i) The bidder must not be Blacklisted/banned/ convicted by any court of law for any criminal or civil offences/ declared ineligible by any entity of any State Government body of public sector undertaking in India for participation in future bids for unsatisfactory performance, corrupt, fraudulent or any other unethical business practices or for any other reason, as on the date of submission of the bid documents	Affidavit sworn before public Notary	

07.	Mandatory Authorization	The Bidder must have a valid Manufacturer Authorization certificate for sale/ Service of their equipment's.	Copy of OEM Authorization Certificate	
08.	Mandatory Condition	The bidder must have work experience / work completion certificate of Minimum 150 CCTV Camera under the Central /State/Government/ PSU/reputed firms which has been done by Cat-6 Cable and Optical Fiber Only in any financial year of 2021-22, 2022-23 and 2023-24	Copies of Relevant Work Order/Experience / Work Completion Certificate Minimum 150 CCTV Camera which has been done by Cat-6 Cable/ Optical Fiber Only.	

**NALANDA OPEN UNIVERSITY, PATNA, BIHAR**

**TENDER FORM**

**To be filled up by the Tenderer**

Advertisement no. ....

Name of Tenderer .....

Full Postal Address of Tenderer .....

.....Mob. No.....Email id.....

Registration No ..... GST No.....

PAN No..... Aadhar no.....

Signature of the Tenderer

**Tender must be submitted in under given formats**

1.

List of Items as per Annexures	Rate

Date

Signature of the Tenderer

**Note: Papers that must be submitted alongwith tender paper**

1. Registration certificate regarding packaging & transportation work
2. GST registration certificate
3. Proof of previous experience of similar nature of work
4. Aadhar card
5. PAN card
6. IT return for last 3 years
7. EMD in the form of Bank Draft – 50000/- (refundable)
8. Tender cost -1000/- (non-refundable)

**IMPORTANT: INCOMPLETE TENDER PAPER WILL BE REJECTED**

## B.O.Q.

S.No.	Particulars	Item Description	Qty.	Unit	Rate Per Unit	Total
1	IP Bullet Camera / IP Dome Camera	5MP IP Bullet / Dome Camera, 1 / 2.7" CMOS, 2592×1944, H.265 /H.264 stream coding, IP 67, Minimum illumination 0.0236 lux @ F2.0, AGC ON; 0 lux with IR, 0.0085 lux@F1.2, AGC ON; 0 lux with IR, 20~30 Mtr IR distance, Built in Micro SD Card Slot Supported upto 128 GB , Support triple streams. <b>(As Per Annexure I)</b>	32	Pcs.		
2	NVR	32 channel NVR, H.265/H.264 or Better Video Compression, Maximum resolution supported upto 12MP, 192 Mbps Network Bandwidth (incoming/outgoing), TCP/IP, IPv4, Ipv6, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, SMTP, HTTP, HTTPS, 802.1x, RTSP, SNMP, ONVIF Protocol, RJ45 10/100/1000 Mbps × 2 interface, 4 Sata supported per sata 10 TB capacity, E-Sata × 1 <b>(As Per Annexure III)</b>	1	Pc.		
3	8 Port POE Switch	8 Port POE Full Giga switch with 2 Giga uplink & 2 SFP port, Support restrain network strom, Maximum POE power 150 Watt, Support lightning protection on 4000V, Transmission distance upto 100 meters, Switching capacity 20 Gbps, Throuhput 14.88 Mbps, IEEE802.3af/at Poe Standard, Working Temperature 0 degree celcius to 55 degree celcius <b>(As Per Annexure IV)</b>	12	Pcs.		
4	HDD	8 TB Hard Disk Drive	4	Pcs.		
5	CAT 6 UTP Cable	Specifications Category: 6 UTP Solid cable Conductor: Conductor: 23 AWG (Solid) Conductor Meta: Conductor Meta: Bare Copper Insulation Material: HD-PE OD : 6.1mm ±0.2 Resistance Unbalance : 5% Max Capacitance Delay Skew : <45nS Unbalance : 330pF/100m	Approx.. 1525	Mtrs.		
6	Power Wire	3 Core, 1.5 Sqr. MM. Power Cable, Multistrand copper conductor, PVC insulated	Approx.. 720	Mtrs.		
7	4U Rack	4U Network Rack	1	Pc.		

8	Junction Box	PVC Junction Box - POE Switch	12	Pcs.		
9	Monitor	Ultra HD TV Signage (65 inch) Specification of 65" Monitor, 65" 4K UHD (3840x2160) resolution, Built in OS LED display with built in 2.4 GhzWifi, 1.1 Ghz Built in Quad core processor, 2 GB DDR3 RAM, built in Triple Mali 600 MHz GPU, with 4K 10HDR, Dolby Audio, Built in Wifi and Chromecast, Built in web browser, HDMI CEC, HDMI ARC, Built-in Bluetooth Ver.4, 20W built in speakers, HDMI 2.0 X 3, AV X 1, USB 2.0 X 2, RJ45 X 1, Headphone Out x 1, SPDIF Out x 1	1	Pcs.		
10	SD Card	128 Gb Micro SD Card	32	Pcs.		
11	Online UPS	Online UPS 3 KVA with 1 Hour Battery Backup on Full Load	1	Pc.		
12	Laying	Laying of Cat 6 Cable & Power Cable with PVC Conduit	2245	Mtrs.		
13	Installation	Installation, Networking, Testing & Commissioning of IP CCTV Camera	32	Camera		
14	Service	On Site Service (24 X 7) for 2 Year After work Completion	32	Camera		
15	Software	System should be provided with suitable software for monitoring, archiving, replay of stored files. Software should be able to connect all the cameras and should be upgradable without any extra charge.	1	Pc.		

**By the Order of Vice-Chancellor**

**Registrar  
Nalanda Open University**