



हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय Central University of Himachal Pradesh

धर्मशाला, जिला - कांगड़ा, हिमाचल प्रदेश - 176215
Dharamshala, District Kangra (HP)-176215

Ref. No: CUHP/IT/CAMP/1-1/18

Date: 20.03.2023

NOTICE INVITING QUOTATION

For and on behalf of Central University of Himachal Pradesh, sealed Quotations are hereby invited by the undersigned for “ **Installation and Commissioning of CCTV at various location in Central University of Himachal**” from respective service providers/vendors/firms having experience of installation and commissioning of CCTV cameras in various offices/organizations/educational institutions as per schedule attached at **Annexure-II**. The sealed envelope containing quotation shall be superscribed with the **Name of Work, Quotation Enquiry Ref. No. & Date** and shall reach the O/o Honorary Director, Computer Centre , Dhauladhar Parisar -1, Dharamshala by registered post or delivered personally latest by **27.03.2023 upto 10:00 AM** and shall be opened on the same day at 11:00 AM in the O/o Honorary Director, Computer Centre , Dhauladhar Parisar -1, Dharamshala in the presence of intending bidders or their authorized representatives.

Application for Quotation Document must be accompanied with the self-attested (signed and stamped) copies of the following qualifying documents:

- 1.) GST certificate.
- 2.) PAN Card.
- 3.) List of clients (Offices/organizations/educational institutions) where similar work has been executed, attach their work orders and work completion certificates.
- 4.) Signed copy of terms & conditions (Annexure-I)
- 5.) Schedule of quantities (Annexure-II)
- 6.) Attach the datasheet and brochures of the supplied quantity.
- 7.) Signed copy of compliance of technical specifications (Annexure-III)
- 8.) The Bidder should not have been blacklisted by any Central/State Government Organization or PSU, should not have any court case against the Bidder for any corrupt and fraudulent practice. An Undertaking by the Authorized Signatory on the legal paper by Bidder should be submitted as a part of qualifying document for quotation.
- 9.) Bidder/vendor should submit their proof of office address.

Detailed quotation document can be downloaded from the University website (www.cuhimachal.ac.in or www.hpcu.ac.in).

Honorary Director ,
Computer Centre, Dhauladhar Parisar -1
Central University of Himachal Pradesh
Dharamshala, Distt Kangra. Himachal Pradesh

Copy to:

1. Notice board.
2. University Website.

Honorary Director

Terms & Conditions

1. The work is to be completed within **15 days**, to be reckoned from the next day from date of award of work.
2. The quantities of work in the schedule (refer **Annexure- 'II'**) are provisional and likely to vary (increase or decrease).
3. The prices quoted should be net inclusive of all the charges i.e. freight, Labour, T&P, Carriage, Lead/Lift and GST and nothing extra is to be paid.
4. Bidders are advised to visit the site (Dharamshala and Shahpur) before quoting the rates to assess the quantum and scope of work.
5. 90% of Payment shall be made only after the work is completed as per actual quantity and quantum of work executed satisfactorily. 10 % of total payment is released after completion of warranty period, no advance shall be paid.
6. The bidder shall be responsible for any delayed response that takes place during the maintenance period of 1 year due to negligence of work performed by the Firm. He shall also be responsible for payment of compensation and penalties payable to the Central University of Himachal Pradesh as a result of legal action. He shall also be responsible for replacement of damaged parts within the warranty period and restore services immediately failing which, a penalty @ Rs. 1000/- per day shall be imposed and recovered from balance amount due to the bidder applicable.
7. All material to be used on the work will have to be got approved from the Computer Centre.
8. The quotation for the work shall have validity for a period of 30 days from the date of opening of quotations.
9. The bidder/firm has to abide by labour rules and regulations.
10. All applicable Taxes and Statutory Deductions shall be deducted from the final bill.
11. In case of any dispute, the decision of Vice-Chancellor, CUHP is final and binding on the bidder.
12. The Central University of Himachal Pradesh reserves the right to accept or reject any or whole quotation without assigning any reason thereof.
13. The firm/bidder shall be responsible for faithful compliance of the terms and conditions enunciated in this document. In the event of any breach of any of the terms and conditions, the assigned work may be terminated and further the work order may be got executed from another agency at risk and cost of the firm/Bidder.
14. Addressing of Technical Problems / tickets should be addressed within 24 hours and replacement if required shall be provided within 3 business days.
15. In case of any queries/doubts the bidder(s) can visit the Office of **Honorary Director** Computer Centre, Dhauladhar Parisar -1 at Dharamshala.
16. Bidders/Vendors also provide the quote of AMC for above said work after completion of warranty period for one and three years respectively. If AMC contract approved by the competent authority Amount should be released proportionally on yearly basis after getting the work satisfactory certificate on yearly basis.
17. Items mentioned in the Bill of Quantity should be from a reputed make and of assured quality

Honorary Director
Computer Centre, Dhauladhar Parisar -1
Central University of Himachal Pradesh
Dharamshala, Distt Kangra, Himachal Pradesh

I acknowledge that I have read, and do hereby accept the terms and conditions contained in this quotation document.

Signature with date of bidder

Name (CAPITAL): _____

Address:

Contact no:

BILL OF QUANTITIES

Name of Work: Installation and Commissioning of CCTV at various location in Central University of Himachal.					
Name of Bidder:					
S. No.	Description	Unit	Quantity	Unit Rate Quoted(Incl. of GST) (Rs.)	Amount (Incl. of GST) (Rs.)
1	8 Channel NVR for 8 TB storage or more	No.	4		
2	16 Channel NVR for 16 TB storage or more	No.	1		
3	PoE/uPoE Gigabit Switch 8 port	No.	6		
4	Cat 6 Cable Rate Per Mtr	No.	3000		
5	RJ45 Connectors	No.	200		
6	4U Rack	No.	5		
7	LED 22"/24" or larger	No.	3		
8	LED 30 "/32" or larger	No.	1		
9	LED 40"/42" or larger	No.	1		
10	IP Camera - Dome 2MP	No.	12		
11	IP Camera - Bullet 2MP	No.	21		
12	HDD 8 TB sata	No.	3		
13	HDD 4 TB sata	No.	3		
14	1 KVA Offline UPS with double battery	No.	5		
15	installation and fixing of Camera, Cost of Conduit with casing and capping (exclude PVC Pipes, shall be provided by the university) /mtr./ clamping/any other accessories required for commissioning of CCTVs and allied components	Mtr	3000		
			Total (in Rs.)		
Total Amount in Words:					

Signature of bidder

Name: _____

Address: _____

Technical Specification**Item at Sr. No 1****8 Channel NVR**

Feature	Specification
IP Camera Input	8 channel
Operating System	Embedded LINUX
RCA Input/ Output	1 Channel Input, 1 Channel Output, RCA or better
User Interface	Web/operating in local GUI
Video Output	1 VGA/1 HDMI simultaneous video output, maximum resolution 1080P or better
Compression	H.265/Smart H.264+/H.264 or better
Decoding Capability	Yes
Resolution	8MP/5MP/4MP/3MP/1080P/720P/D1/CIF or more
Video Display Split	1/4/8/9
Multi-channel Playback	Up to 8 Channel
Playback	Play, pause, stop, fast forward, fast backward, rewind, play by frame, Full screen, backup (cut/file), partially enlarge, audio on/off or more
Various Recording Modes	Yes
Various Alarm Feature	Yes
Hard Disk	1 SATA 2.0, up to 8TB Each or more
Smart Phone	iPhone, iPad, Android Phone
Backup Mode	USB Device
Storage	Local HDD & Network
Interface Ports	2 USB Ports (1 Rear USB 2.0 , 1 Front USB 2.0) or more
Ethernet	1 RJ-45 Port (10/100Mbps)
Protocols	HTTP, HTTPS, TCP/IP, IPv4, IPv6, RTSP, UDP, NTP, DHCP, DNS, ONVIF (profile T/profile S/profile G), RTSP, CGI, SDK or more
Power Supply	DC12V, 3A or less

Item at Sr. No 2**16 Channel NVR**

Feature	Specification
IP Camera Input	16 channel
Operating System	Embedded LINUX
RCA Input/ Output	1 Channel Input, 1 Channel Output, RCA or better
User Interface	Web/operating in local GUI
AI by Camera and Device	Yes
Video Output	1 VGA;1 HDMI simultaneous video output, maximum resolution 4K or better
Compression	H.265/Smart H.264+/H.264 or better
Decoding Capability	Yes
Resolution	12MP;8MP;5MP;4MP;3MP;1080P;720P;D1 or more
Video Display Split	1/4/8/9/16
Multi-channel Playback	Up to 16 Channel
Various Playback modes	Yes

Various Recording Mode	Yes
Various Alarm features	Yes
Alarm Linkage	Video recording, snapshot, log, preset, tour or more
Hard Disk	1 SATA 2.0, up to 8TB Each or more
Smart Phone	iPhone, iPad, Android Phone
Backup Mode	USB Device
Storage	Local HDD & Network
Interface Ports	2 USB Ports (1 Rear USB 2.0 , 1 Front USB 2.0) or more
Ethernet	1 RJ-45 Port (10/100Mbps)
Protocols	HTTP, HTTPS, TCP/IP, IPv4, IPv6, RTSP, UDP, NTP, DHCP, DNS, ONVIF (profile T/profile S/profile G), RTSP, CGI, SDK or more
Power Supply	DC12V, 6A or less

Item at Sr. No 3

Specification of 8 Port PoE Switch

Type of Switch	Managed/smart
Technology	PoE (8, 1000Mbps; RJ45 ports; Max. 30W Output of Single PoE Port Transmission distance: 0~100) or better
PoE Standard	IEEE802.3af, IEEE802.3at or higher
Number of 1G Copper Ports	8
Number of 1 G Port (Uplink)	2
Network Protocol	IEEE802.3i/802.3u/802.3x/802.3af/802.3ab or more
Vlan support	yes
IPv6 Ready from day one and dully certified	Yes
PoE Power Budget (Watt)	100 or less
Transmission Distance	>90m
On Site OEM Warranty	1 Year or more

Item at Sr. No. 4

Specification of CAT 6	
"CAT6 Cable can transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 250 MHz and suitable for 10BASE-T, 100BASE-TX Fast Ethernet and 1000BASE-T / 1000BASE-TX (Gigabit Ethernet)."	Yes
Maximum DC resistance	Max. 100 Ohm/Km

- in Ohm/Km	
Conductor Material	Bare Copper
Conductor Insulation Material	Polyethylene
Inner jacket material	PVC
Conductor stranding	Solid
Cable should have internal cross separator	Yes
Storage temperature range	-20 deg.C to +70 deg. C
Operating temperature range	-20 deg.C to +60 deg. C
Each meter printed with sequential length counter of cable apart from marking requirement as per relevant specifications and certifications	Yes
Generic	
Cate 6 cable (Out door use) conforming to TIA/EIA-568 C.2 or ISO/IEC:11801 latest	Yes
Cable category	CAT6 UTP - Outer jacket PVC with Aluminium Armoured wire
Conductor diameter	0.57 mm (23 AWG)
Conductor count	8
Length of cable in a bundle (Mtrs)	305 mtrs
CERTIFICATIONS	
Category 6 cable shall have valid verified certificate from ETL /Intertek/UL/3P /GHMT /Delta as per CAT 6 standards ANSI//TIA/EIA-568 C.2 latest or ISO/IEC:11801 latest	Yes
UL Marking on Cable	Yes

Item at Sr. No. 6

Specifications of 4U Rack

Type of Server Racks	Portable Racks
Size of Server Rack Enclosure	4U

Mount Type	Wall mount
Front glass Door	Yes
Type of glass used in front door	Transparent Toughened Glass
Material used for rear door	SPCC Quality Cold Rolled Steel Metal or better
Secure Locks	Available
Support cable entry from top or bottom	Yes
Vertical & Horizontal managers	Yes
Number of Fan For Heat dissipation (nos)	1 or more
Load Bearing Capacity (Kgs)	25 kilogram or more
PDU Power Strips	Available
Warranty (Years)	1 or more

Item at Sr. No. 7

Specifications of 22/24 inch Display

Type of Display Technology	LED Backlit LCD or better
Screen Size (Inches)	24 or higher
Resolution (Pixels)	(1366 x 768) HD Ready or better
Mount Type	Both table and wall mount
Inbuilt Speakers	Yes
If Yes, Wattage of Speakers	10W x 2 or higher
Power Consumption (Watts)	< 60
Ports & Connectivity	
Number of HDMI Ports	1 or more
Number of USB Ports	1 or more
Number of VGA Ports	1 or more
Input	
Composite Input	Yes
Component Input	Yes
RF Input	Yes
Accessories	
Details of accessories (included in the scope of supply)	Remote Control,Connecting Cable,Batteries, Wall Mount accessories
Warranty	
Warranty(Years)	1 or more

Item at Sr. No. 8

Specifications of 30/32 inch Display

Type of Display Technology	LED Backlit LCD or better
Screen Size (Inches)	30 or higher
Resolution (Pixels)	(1366 x 768) HD Ready or higher

Mount Type	Both table and wall mount
Inbuilt Speakers	Yes
If Yes, Wattage of Speakers	10W x 2 or higher
Power Consumption (Watts)	50 or less
Ports & Connectivity	
Number of HDMI Ports	1 or more
Number of USB Ports	1 or more
Input	
Composite Input	Yes
Component Input	Yes
RF Input	Yes
Accessories	
Details of accessories (included in the scope of supply)	Remote Control,Connecting Cable,Batteries, wall mounting kit
Warranty	
Warranty(Years)	1 or higher

Item at Sr. No. 9

Specifications of 40 /42 inch Display

Type of Display Technology	LED Backlit LCD or better
Screen Size (Inches)	40 or higher
Resolution (Pixels)	(1366 x 768) HD Ready or higher
Mount Type	Both table and wall mount
Inbuilt Speakers	Yes
If Yes, Wattage of Speakers	10W x 2 or higher
Power Consumption (Watts)	120 or less
Ports & Connectivity	
Number of HDMI Ports	1 or more
Number of USB Ports	1 or more
Input	
Composite Input	Yes
Component Input	Yes
RF Input	Yes
Accessories	
Details of accessories (included in the scope of supply)	Remote Control,Connecting Cable,Batteries, wall mounting kit
Generic	
Warranty	
Warranty(Years)	1 or higher

Item at Sr. No. 10

Specification of 2MP IP Bullet Camera

Image Sensor	
Image Sensor Type	CMOS
Image Sensor Size	1/2.8" Progressive scan or better
Camera Image Sensing capacity (Picture Mode)	2MP
Resolution	Full HD (1920 x 1080 Pixel) or better
Day/Night Capable	Yes
IR illumination Range(mtr)	30 or better
CAMERA TYPE	
Type of Camera Housing	DOME CAMERA
IP Camera	Yes
OPTICS	
Lens Type	Fixed
Focal Length(mm)	3.6 OR BETTER
VIDEO	
Video Compression	H.264,H.265+ or higher
Video Streaming	Dual compressed stream
PAN / TILT / ZOOM	
Digital Zoom	yes
SECURITY	
Encrypted Data Transmission	HTTPS (SSL/TSL)
PERFORMANCE	
Minimum Illumination for Capturing Color Image	0.01 lux or better
Electronic Shutter Speed(sec)	1/3 to 1/100000 or better
WDR (Wide Dynamic Range)	DWDR
SNR (Signal to Noise Ratio)	50-60 dB or higher
FEATURES	
White Balance (Indoor/Outdoor/Manual Selectable)	Yes
Auto Gain Control (On/Off selectable)	Yes
Back Light Compensation	Yes
ONVIF Support	Yes
Privacy Zones	4
NETWORK AND INTERFACE	
Supported Protocols	UDP,DHCP,RTP,HTTP,TCP/IP,IPv4,ARP or more
IP Support	Static,Dynamic
Signal Processing	Digital Signal Process
IPv6 ready	Yes
HOUSING	
Installation Type	Indoor,Outdoor
Material of the Housing construction	Metal + Plastic
Protection	IP67 or better
Mounting bracket	Ceiling Mounted
POWER SUPPLY	
Power Input	PoE,12 V DC

Power Consumption	3 Watt or less
WARRANTY / SERVICES	
Warranty	1 year or higher
Time for Replacement of Defective Product During Warranty Period	72 hour
Supply of Compatible drivers and software included	Yes

Item at Sr. No. 11

Specification of 2MP IP Bullet Camera

IMAGE SENSOR	
Image Sensor Type	CMOS
Image Sensor Size	1/2.8" 2MP PS CMOS Image Sensor (0.9071cm) or better
Resolution	Full HD (1920 x 1080 Pixel),HD (1280 x 720 Pixel) or higher
Day/Night Capable	Yes
IR illumination Range(mtr)	30 or better
CAMERA TYPE	
Type of Camera Housing	BULLET CAMERA
IP Camera	Yes
OPTICS	
Lens Type	Fixed
Focal Length(mm)	3.6 or better
VIDEO	
Video Compression	H.264,H.265+ or better
Video Streaming	Dual compressed stream
SECURITY	
Encrypted Data Transmission	HTTPS (SSL/TSL)
PERFORMANCE	
Minimum Illumination for Capturing Color Image	0.01 lux
Electronic Shutter Speed(sec)	1/3 to 1/100000 or better
WDR (Wide Dynamic Range)	DWDR
SNR (Signal to Noise Ratio)	50-60dB or higher
FEATURES	
ONVIF Support	Yes
Privacy Zones	4
NETWORK AND INTERFACE	
Supported Protocols	UDP,DHCP,RTP,RSTP,HTTP,SMTP or more

IP Support	YES
Signal Processing	Digital Signal Process
IPv6 ready	Yes
HOUSING	
Installation Type	Indoor,Outdoor
Material of the Housing construction	Plastic + metal
Protection	IP 66 or better
Mounting bracket	Wall Mounted
POWER SUPPLY	
Power Input	PoE,12 V DC
Power Consumption	5 Watt or less
Warranty	1 year or higher
Time for Replacement of Defective Product During Warranty Period	72 hour
Supply of Compatible drivers and software included	Yes

Item at Sr. No. 12

Specification of 8TB HDD

Capacity of Drive (GB)	8000
Type of Drive	SATA HD
Rotational Speed (rpm)	7200
Interface Type	SATA
Transfer Rate (Maximum) (MB/s)	175 or higher
Cache (MB)	128 or higher
Rated Power (Watt)	8.8 or less
Rated for 24/7/365 operation	Yes
Warranty (Years)	3 or higher

Item at Sr. No. 13

Specification of 4TB HDD

Capacity of Drive (GB)	4000
Type of Drive	SATA HD
Rotational Speed (rpm)	7200

Interface Type	SATA
Synchronous Transfer Rate (Maximum) (MB/s)	150 or higher
Cache (MB)	64 or higher
Rated Power (Watt)	6 or less
Rated for 24/7/365 operation	Yes
Warranty (Years)	3 or higher

Item at Sr. No. 14

Specification of 1 KVA Offline UPS

Rating (in KVA)	1
Technology	MOSFET-PWM
Inverter Efficiency (%)	70% or better
Minimum Guaranteed Battery Backup time (Minutes) on Full Load	30 or better
Warranty for Line Interactive UPS	1 Year or more
Battery/Backup Bank	
Type of battery	SMF-VRLA
Location of Battery	Inside the Enclosure of UPS
Battery capacity (Ah)	7Ah or better
Number of Batteries	2
Warranty for the battery from the date of delivery	1 Year or more
FEATURES	
Rated Output (Volt) with Total Harmonic Distortion (%)	Single Phase Quasi Sinewave 230 V AC 50 Hz with Total Harmonic Distortion as $\leq 40\%$ or better
Input (Volt)	Single Phase AC (160-280V) or better
Variation in AVR output in AC mode (AVR Voltage regulation)	230 Volts +/-15% or better
Protection	Under voltage Protection (Input Voltage < 160 V), Overvoltage Protection (Input Voltage > 280 V), Short Circuit of UPS, Low Battery, Overload or more