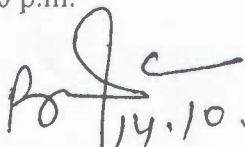


MOTILAL NEHRU COLLEGE : BENITO JUAREZ MARG : NEW DELHI-21
(University of Delhi)

MNC/BJM/2014/ 1105

DATE : 14.10.2014

Sealed quotations are invited from authorized firms for supply and installation of CCTV system in the College premises. The details of the CCTV systems are enclosed. You may also enclose a copy of PAN number and profile of your firm along with the quotation. Please write on the top of the envelope "*Quotation for CCTV*". Your quotation should reach the undersigned latest by 25.10.2014 up to 03.00 p.m. For further details you may visit the College office on all working days between 10.00a.m. to 3.00 p.m.


14.10.14
Officiating Principal

Encl : As above

Closed Circuit Television (CCTV System) for Motilal Nehru College, University of Delhi,

South Campus

Motilal Nehru College, University of Delhi, South Campus, Benito Juarez Road, New Delhi-110021 intends to install CCTV System in the college. The CCTV system shall comprise of High Resolution Fixed Dome Camera, High Resolution True Day & Night Box Camera, Weatherproof Outdoor Speed Dome Camera and High Definition and Hard Disk Hot Swappable D1 16 Channel DVR for local viewing/monitoring, recording for minimum 15/30 days & management. The system should have the capacity/expandability to install more cameras if required in near future. The cameras will be installed at the decided sensitive locations in the campus and shall have a dedicated local storage for minimum 15/30 days which can be accessed as and when required by the college management/administration. The bidder should take into consideration all required items/equipment's/consumables while quoting in order to have the complete prove-out of the desired CCTV System, which however may not be specifically mentioned in this document/schedule of items. The items like Cameras, Digital Video Recorders and Video Management System/Software etc. should be of the same make/OEM in order to achieve proper compatibility between the devices and complete functional prove-out of the CCTV System.

The Eligibility Criteria & Conditions are given in Annexure-I.

Brief Bill of Material of CCTV System is given in Annexure-II.

Technical Specifications of CCTV System are given in Annexure-III.

Annexure-I

Eligibility Criteria & Conditions

1. GENERAL:

The present tender is being invited for CCTV System under which the bidder shall furnish the documents in support of the following criteria, failing which the offer shall not be considered for further evaluation.

2. ELIGIBLE BIDDERS:

The bidders shall fulfill the following criteria:

- i. The Original Equipment Manufacturer (OEM) of the CCTV system i.e High Resolution Fixed Dome Camera, High Resolution True Day & Night Camera, Weatherproof Outdoor Speed Dome Camera and High Definition and Hard Disk Hot Swappable D1 16 Channel DVR shall be based in India and registered as a company under Indian Companies Act for at least last 5 years.
- ii. Bidder shall submit the financial statements including Balance Sheet, Income Tax Return for last 3 financial year, PAN, VAT and Service Tax Registration Certificate.
- iii. The product being offered/quoted/proposed by the bidder for CCTV system should be essentially a proven & established product in the market for at least last 5 years. College may ask the bidder to show the reference installations to find the credentials of the bidder to establish the after sales support during warranty and post warranty period.
- iv. Manufactured products shall have quality system compliance/certificates as desired in the technical specifications.
- v. If the bidder is not the OEM, this tender specific OEM authorization letter is required for back-to back service and spares support for at least 05 years, in absence of which the tender shall be summarily rejected. The OEM would take responsibility to supply spares and service in case of failure of their authorized partner and would proved the same through some other partners without any additional cost to the college during warranty period.
- vi. OEM of CCTV system shall have base with technical support function in Delhi/NCR through authorized partners.
- vii. Technical literature catalogues of the equipment/components offered shall be submitted with the technical bid.
- viii. This tender will be a two-bid system tender comprising of Technical Bid & Price Bid. Price Bid of only those bidders will be opened who will qualify in the Eligibility Criteria & Technical compliance.
- ix. The company/firm should have experience of installing the CCTV in educational institution preferably in Delhi University.
- x. Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a bid will be an offence under Laws of India. Such action will result in the rejection of bid, in addition to other punitive measures.

- xi. The qualifying bidder should ensure the installation of CCTV in the college within one month after the order.
- xii. The college reserves the right to consider the quotations which incorporate state of art technology even when such specifications are not given in this document.

Brief Bill of Material of CCTV System

S.No	Item Summary	Item Brief Description
1	Fixed Dome Camera	1/3" CCD, 580 TVL, 1.0 lux (30IRE), Internal Sync., AWB / BLC/ AGC, WDR, DNR, BMB, True Day/Night, 2.8-10mm vari-focal lens, DC 12V as per tender specifications.
2	Fixed Box Camera	1/3" CCD, High-Resolution CS mount Camera with DSP, 580 TVL, 2.7-13.5mm Vari-focal Lens, TDN, WDR, 123 VDC, PAL as per tender specifications.
3	Speed Dome Camera	1/4" CCD, 480 TVL, Built-in f=3.6-129.6 mm Lens and IP 66 standard, lighting & surge protector, high strength metal housing, heater and fan as per tender specifications.
4	Power Supply for Cameras	Supply of SMPS Power Adaptor- 12 VDC/24 VAC, 1 AMP for cameras
5	Digital Video Recorder	Enterprise Level 16-Channel Embedded Digital Video Recorder, 400/480fps at D 1 recording, Supports English GUI, 4 SATA ports, Hot Swap Hard disk design and 100-240 VAC as per tender specifications.
6	Monitor	22" Full HD LED Monitor for viewing & monitoring
7	Co-axial Video Cable	Supply of Video Cable-RG-6 or RG-11 (Where distance is more than 90 Meters)
8	Power Cable	2 Core, 1.5 sq. mm. Power cable for providing power to camera
9	Conduits	PVC Conduits-25/50 diameter
10	Connectors	BNC Connectors to connect camera
11	Consumables	Miscellaneous Consumables

Detailed Technical Specifications

1. The fixed dome camera should comply with the following minimum technical requirements:

Minimum Required Specifications	
Video Standard	PAL
Scanning System	Interlaced
Image Sensor	1/3" Interline Transfer CCD or better
Number of Pixel	752 (H) x 582 (v) or better
Minimum Illumination	0.001 lux or better
Horizontal Resolution	580 TVL or better
Video Output	1 V p-p, 75 Ohms
Sync System	Internal
Day & Night	Yes, True Day/Night
Back light Compensation (BLC)	BLC (Off/Low/Medium/High); BMB;WDR (Level Adjustable)
Sens-up	520 Fields
Digital Noise Reduction (DNR)	Off/Low/High
Digital Zoom	16x or better
White Balance	ATW/AWC/One-push Lock/Indoor/Outdoor/Manual
OSD	Built-in OSD
Privacy Function	8 zones, selectable
Motion Detection	Area selectable, Sensitivity Adjustable, Output: Mark & Alarm
S/N Ratio	More than 50dB
Auto Gain control (AGC)	0-40dB
Automatic Electronic Shutter (Sec)	1/50-1/100,000 sec or better

Lens	2.8-10 mm vari-focal
Other Function	Mirror (/H/V/Flip); PIP; QUAD; Privacy Mask (8 zones); Night Mode
Input Range	11 – 16 VDC
Surge Suppression	1.5 kW Transient
Certificate	CE/UL, FCC
Outdoor Housing	Die-cast and extruded aluminum construction wall mount-12 inch, Clear 1/8" double density glass, Epoxy powder coated for corrosion resistance and dust-proof, IP66 weatherproof rating with sunshield AC24V and Heater and Blower, Operating Temp:- 20 ⁰ to 60 ⁰ and Cable routing through Base or Rare of the housing

2. The fixed box camera should comply with the following minimum technical requirements:

Minimum Required Specifications	
Video Standard	PAL
Image Sensor	1/3" Interline Transfer CCD or better
Number of Pixel	752 (H) x 582 (V) or better
Minimum Illumination	0.001 lux or better
Horizontal Resolution	580 TVL or better
Video Output	1 V p-p, 75 Ohms
Sync System	Internal
Day & Night	Yes, True Day/Night
Back light Compensation (BLC)	BLC (Off/Low/Medium/High); BMB;WDR (Level Adjustable)
Sens-up	520 Fields
Digital Noise Reduction (DNR)	Off/Low/High
White Balance	ATW/AWC/One-push Lock/Indoor/Outdoor/Manual
OSD	Built-in OSD
Privacy Function	Yes
Motion Detection	Area selectable, Sensitivity Adjustable, Output: Mark & Alarm
S/N Ratio	More than 50dB
Auto Gain Control (AGC)	0-30dB
Automatic Electronic Shutter (Sec)	1/50-1/100,000 sec or better
Lens	2.7~13.5 mm F1.3, DC Auto Iris, IR Corrected A spherical VAri-focal
Angle of View	Wide: 99 ⁰ 42' x 74 ⁰ 17' / Tele 20 ⁰ 37' x 15 ⁰ 30'
Back focus distance (W-T)	8.91-22.5 mm
Iris Range	F1.3~ T360
Iris Control	4-pin DC
Exit Pupil Position	3.59" (91 mm)
Input Range	10 – 14 VDC
Certificate	CE/UL, FCC

3. The speed dome camera should comply with the following minimum technical requirements:

Minimum Required Specifications	
Video Standard	PAL
Image Sensor	¼ IT HAD CCD Sony or better
Number of Pixel	752 (H) x 582 (V) or better
Minimum Illumination	0.0001 lux or better
Horizontal Resolution	480 TVL Color, 520 TVL B/W or better

Video Output	1 V p-p, 75 Ohms
Sync System	Internal
Day & Night	ICR True Day/Night
Back light Compensation (BLC)	BLC ON/OFF
White Balance	Manual/Auto /Indoor/Outdoor/ATW
S/N Ratio	More than 50dB
Automatic Electronic Shutter (Sec)	1/50 – 1/10,000 sec or better
Aperture Range	F1.6 (wide)~F4.2 (tele)
Lens Focal Length	F=3.6 mm~129.6 mm
Angular Field of View	53.8'(wide)-1.64' (tele)
Pan Angle	360 ⁰ Rotation Capability
Tilt Angle	0 ⁰ ~90 ⁰
Zoom	36 x Optical Zoom, 12 x Digital Zoom
PTZ Tours (Pattern)	3 Programmable, 120 Seconds
Preset Positions	128 Maximum
Power Input	24 VAC 2A 60Hz/50Hz, Surge Protector
Certificate	CE/UL/, FCC
Housing	ICR true day/night, IP 66 standard, lighting & surge protector, high strength metal Housing, heater and fan

4. The Digital Video recorder will have 16 video inputs and have the following minimum features:

Operating System	Embedded LINUX
Operation	Front Panel, USB Mouse, Network
Number of Channels	16 Channel, BNC (1.0V Vp-p, 75 Ohm), PAL/NTSC
Video Compression	Advanced H.264 compression
Display Frame Rate	Real Time
Video Recording	4 CIF, 25fps (real time)
Recording Resolutions	D1/4CIF/HD1/2CIF/CIF/QCIF, 25/30fps (Real Time), Dual Encoding Streams
Video Bit Rate	64 Kbps~ 5Mbps
Video Motion Detection	Independent Channel configuration, Up to 396 (22*18) Detection Zones, Sensitivity: 1-6 Level Adjustment
Video Recording mode	Continuous/Scheduled/Sensor Based/ Motion Detection Based/ Manual
Video Outputs	2 Composite Video Output, 1.0 Vpp, 750 BNC: 1 VGA (1080P); 1 HDMI (1080P)
Event Trigger	External inputs, Video loss, Camera Covered, Motion Detection
Video Buffer	5s pre-and 50S post-alarm per channel
Network Failure Recovery	Automatic local record upload to center storage
Dual Streaming	16 channel individually configurable second stream
Multicast	16 channel individually configurable multicast
Audio Compression	Standard G.711
Audio Bit Rate	64 kbps
Audio Input	16 Line In

Intercom Input	1 Channel, RCA
Audio Output	1 Line Out
Multi –screen Channel	1,4,6,7,8,9,11,12,16 and 20
Image Quality	1-6 Level Adjustment
Video Loss and Blank	Trigger Recording, PTZ Control, Alarm Output, Email
Dual Encoding Streams	Supported
Over write Mode	Yes
Search Mode	Date/time, Event (Alarm, Motion Detection)
Playback Mode	4 Channels Local Playback
Remote Control Function	Monitor, PTZ Control, Playback, Configuration, Download
Internal HDD supported	Hot Swappable SATA (Up to 4), Each HDD Supports Up to 2TB
Internal HDD Interface	SATA
External HDD Interface	e-SATA port
Network Interface and protocols	RJ-45 (10/100M), RTSP/RTP,HTTP, TFTP, SMTP, DHCP, SSL/TLS, NTP
USB interface	2 USB 2.0 ports
Serial interface	RS-232 port for PC connection
PTZ Connectivity	RS-485
Remote Access Software	Yes
Web Browsing	Yes
Power Input	100 to 240 VAC 50 Hz/60 Hz
Certifications	CCC, CE, FCC, UL