TENDER DOCUMENT

FOR

SUPPLY, INSTALLATION AND COMMISSIONING OF CCTV SYSTEM



KERALA LAW ACADEMY LAW COLLEGE THIRUVANANTHAPURAM-5

1. Introduction

Kerala Law Academy Law College invites sealed techno-financial bids from reputed companies for the supply, installation and commissioning of CCTV system consisting of IR fixed cameras with digital video recorders, colour monitor etc for surveillance of the identified areas at Kerala Law Academy Law College, Peroorkada, Thiruvananthapuram.

1.1. Scope of Work

- a) The bidder is required to supply, install and commission the CCTV System at Kerala Law Academy Law College, Peroorkada, Thiruvananthapuram as per the specifications and conditions specified in the different parts of this Tender document.
- b) The bidders are advised to visit the above mentioned sites before quoting bid in the tender.
- c) The successful bidder shall give comprehensive hands on Training to the officials of Kerala Law Academy Law College on operations, preventive maintenance, recording and retrieval of the CCTV recordings etc.
- d) The successful bidder shall carry out the work strictly as per specifications mentioned in various sections of this tender document to the satisfaction of the indenting department.
- e) Workmanship and material used should be of the best quality.
- f) Bids shall be considered only in those cases where the bidder has quoted for the entire scope of the work.

2. Eligibility Criteria for Bidders:

2.1. Minimum Eligibility Criteria

- a) The company must submit the certificate of incorporation as a part of technical bid. The bidding company must be providing complete solution in security and surveillance/CCTV system for the last three years.
- b) The company must have executed at least three projects of Rs. 5.00 lacs or above.
- c) The bidder should have valid authorization from the principal manufacturer/distributor
- d) The bidder must not be debarred by any State or Central Govt. Department to do business with State or Centre Department or its Autonomous bodies. The bidder must enclose undertaking to this effect.
- e) Product should be and CE, FCC and UL Certified.
- f) Warranty on products should be 2 Years.
- g) OEM authorization required.
- h) Complaint should be attended within 24 hours after service call.

3. Bid Procedures

3.1. Instructions to bidders

Bid Document

A complete set of Tender documents can be collected by the bidders on submission of written application to the, Principal, Kerala Law Academy Law College, Peroorkada, Thiruvananthpauram.05 on free of cost.

The Tender document can also be downloaded from college Web site i.e. www.keralalawacademy.org.

Submission of Bids

Sealed offers prepared in accordance with the procedures enumerated should be submitted to the office of the Principal Kerala Law Academy Law College, Peroorkada, Thiruvananthapuram - 5 on or before the last date i.e. upto 12.00 Noon on 28-06-2016.

Opening of Technical Bids

At 4.00 pm on 28-06-2016 Kerala Law Academy Law College, Peroorkada, Thiruvananthapuram - 5 The bidders or their authorized representatives may be present if they so desire.

Advice to the Bidders

Bidders are advised to study this Tender document carefully before participating. It shall be deemed that submission of Bid by the bidder have been done after their careful study and examination of the Tender document with full understanding to its implications.

Period of Validity of Offer

Offer should remain valid for 90 days after the date of opening of the Pre-Qualification cum Technical bid as prescribed by the Kerala Law Academy Law College.

Language of the Bid Proposal

The Language of the bid proposal as prepared by the Bidders should be in English and all further correspondence with the Kerala Law Academy Law College and all the documents pertaining to the bid proposal shall be in English.

3.2. Procedure for Submission of Bid

The Bids should be submitted in single parts i.e. Technical and Financial Bid.

The Technical and Commercial Bid Cover prepared as above are to be kept in a single sealed cover super scribed with the wordings "Technical and Financial Bids" for CCTV system Kerala Law Academy Law College.

Only authorized person should sign the tender/quotation. His name, designation and address should be given in capital letters.

No tender will be considered unless and until all the documents are properly signed and all corrections must also be signed by the tenderers.

Evaluation of Bids:

An evaluation committee consisting of officials from Kerala Law Academy Law College will evaluate the bids of all the bidders, both technically and commercially as per the following schedule/pattern.

- a) Only Technical Bid shall be opened on the day of opening of the bids at 3.00 P.M. on 25.06.2016 in the presence of bidders representatives who wish to attend at their cost. The bidders' representatives who are present will be required to put their sign in attendance register.
- b) Conditional bids shall be summarily rejected.
- c) The Technical Bid document shall be evaluated as per the following:
 - a) The documentation furnished by the bidder will be examined to see whether the qualifications and specific requirements including technical mentioned in this document are fulfilled.
 - b) The bidders if required shall make a presentation/ demonstration of the CCTV system, if required, to the evaluation committee.
 - c) Kerala Law Academy Law College may ask the bidders to arrange visits of evaluation committee to the departments / organizations where the bidder has already executed such orders as claimed in their bid.
 - d) The Evaluation committee reserves the right to reject any tender bid without assigning any specific reason to the bidders.

The Commercial Bid of those bidders who satisfy the parameters laid out in the Technical Bid will only be opened. The place, date and time of the opening of the commercial bid shall be notified separately.

The bidder is expected to examine all the instructions, forms, terms & conditions and specifications in the Tender document. Further to furnish all the information required in the Tender document or submission of a bid in every respect will be at bidders risk and may result in rejection of the bid.

- 4. 1 Years OEM, onsite comprehensive warranty/ guarantee shall be applicable to the supplied goods
- 5. Payment shall be made after satisfactory installation of systems and proper functioning.

| Read and accepted on behalf of M/s | |
|------------------------------------|--|
| Signature | |
| Name : | |
| Seal: | |
| Date: | |

BOQ (Bill of Quantity) – Approximate

| SI No | Item Description | Qty (Approx) | UOM |
|----------|---|-----------------|------|
| 1 | IP Dome Camera | 14 | Nos |
| 2 | IP Bullet Camera | 15 | Nos |
| 3 | NVR /NDR with Storage – 32 Ch / 16X2 Ch | 1 | Nos |
| 4 | 2 KVA UPS – 60 Minutes Backup | 1 | Nos |
| 5 | 600 VA UPS- 60 Minutes Backup | 2 | Nos |
| 6 | 24 Port Gigabyte PoE Switch with 4 Fibre ports (Cisco / Netgear / D-link) | 1 | Nos |
| 7 | 24 Port Gigabyte PoE Switch (Cisco / Netgear / D-link) | 1 | Nos |
| 8 | 24/16 Gigabyte Port PoE Switch (Cisco / Netgear / D-link) | 1 | Nos |
| 9 | 19 U / 24 U Network Rack with power Strip | 1 | Nos |
| 10 | 6 U Network Rack with power Strip | 1 | Nos |
| 11 | 32" LED HD Monitor / TV | 1 | Nos |
| 12 | 19" LED HD Monitor | 1 | Nos |
| 13 | Hard Disk (Storage) – 8 TB | 1 | Nos |
| 14 | RJ 45- Surge Protector (Indoor) | 24 | Nos |
| 15 | RJ 45 – Surge Protector (Outdoor) | 5 | Nos |
| 16 | PoE Adaptor | 5 | Nos |
| 17 | Media Convertor (Fibre to Ethernet) 10/100 SMF | 1 | Pair |
| | Network | | |
| 18 | Cat 6 UTP Cable | 1000 | Mtrs |
| 19 | Fiber Optic Cable 6 F SMF | 300 | Mtrs |
| 20 | Patch Box with Pigtail | 2 | Sets |
| 21 | Fibre termination box | Required | Nos |
| 22 | 3" 6 Mtr GI Pole for Camera Class B, Tata/ Jindal | 2 | Nos |
| 23 | PVC Conduit Pipes (Various Size) with all accessories (Bend,Coupling,Saddles,Clips,etc) | Required | Nos |
| 24 | RJ 45 Connectors | Required | Nos |
| 25 | Provide Earth (Electrical and Equipments) | Required | Nos |

NB: Please quote Labour charges for fixing of camera, Network cables, conduits, termination of network and required electrical fixing of UPS/ Power Points, etc

General Specification

VIDEO SURVEILLANCE SYSTEM

6. High Resolution Fixed IR Camera:

- **6.1.1:** The Weatherproof Dome Network Camera Equipped with IR LED should have the following features:
 - 1/3" Sony / Panasonic / Honeywell/ Bosch/HikVision
 - Day/ Night auto switch
 - Supper Low illumination
 - IR Range: 20m / Higher
 - PoE
 - IPv4/IPV6 Support
- 6.1.2: The Weatherproof Bullet Network Camera Equipped with IR LED Camera should have the following features:
 - 1/3" Sony / Panasonic / Honeywell / Bosch/HikVision
 - Day/ Night auto switch
 - Supper Low illumination
 - IR Range: 20m / Higher
 - PoE
 - IPV4/IPV6 Support

6.1.3: The camera should meet the minimum following specifications:

| Camera Specification | | | | | |
|---|--|--|--|--|--|
| Image sensor | 1/3 type 1.3 mega pixels progressive scan CMOS | | | | |
| Scanning System | Progressive | | | | |
| Effective pixels | 1280 (H) × 960 (V) / Higher | | | | |
| Msin. Illumination | 0.1 lx / F1.4 (Color) | | | | |
| | 0.01 lx / F1.4 (B/W); 0 lx / F1.4 (IR on) | | | | |
| Shutter time Auto / Manual, 1/3 - 1/100,000 s | | | | | |
| | 2.8 mm - 12 mm (Focal Length), F1.4 (Max. Aperture), H: 92° - 28° V: 17° - 47°(Angle of View), | | | | |
| Lens | Motorized / Fixed Iris (Lens Type), 1.3 M (1280 × 960) / 720p (1280 × 720) / D1 (704 × 480) / CIF (352 × 240) (Resolution) | | | | |
| Day & night | Electronic | | | | |
| Synchronization Internal synchronization | | | | | |
| Video | 1.3 M / 720p (1 - 30fps) -1 , D1/CIF (1 - 30fps) | | | | |
| S/N ratio More than 50 dB | | | | | |
| Network | RJ45 (10/100Base-T) | | | | |

| Protocol | IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNM P, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter,QoS, | | | | |
|----------------------|--|--|--|--|--|
| General | | | | | |
| Operating conditions | -30 °C ~ 60 °C (-22 °F ~ 140 °F) Humidity 90% or less (non-condensing) | | | | |
| Weather proof rating | IP66 rated water and dust resistant | | | | |
| IR range | Approx. 20 to 40 meters | | | | |
| Power supply | DC12 V, PoE (IEEE802.3af) | | | | |
| Power consumption | Max. 3 – 8 W | | | | |
| Certification | CE,FCC and UL | | | | |

6.2.1: The Network Video Recorder (NVR)/ Network Disk Recorder (NDR) should have the following features:

- Sony / Panasonic / Honeywell / Bosch/HikVision
- H.264 / MJPEG /JPEG / Full HD support
- HDMI /VGA/BNC Simultaneous video output
- Support 32 Channel synchronous real-time playback
- Support 4 TB / Higher Storage support
- IPV4/IPV6 Support
- Multiple network monitoring (Web browser/mobile/etc)

| Specification Of NVR/NDR with Storage - 32 CH | | | | | |
|---|--|--|--|--|--|
| Video/Audio input | | | | | |
| Video compression | H.264/ MJPEG | | | | |
| Video (Ip Camera) input | 32-ch | | | | |
| Audio input interface 1 channel input (RCA), 1 Channel output (RCA) | | | | | |
| Video/Audio Recording | | | | | |
| Compression | H.264 / MJPEC/JPEC | | | | |
| Record Mode | Manual, Schedule- Regular/Continuous, etc | | | | |
| Bit Rate | 48-8192 kbps / Higher | | | | |
| Resolution | 3MP (2048x1536)/1080p (1920x1080) /720p(1280x720) /D1(704x480), VGA (640x480) / CIF (352x240) & etc | | | | |
| Video Detection & Alaram | | | | | |
| Alarm Action | Recording, PTZ, Tour, Video Push, Buzzer & Alarm PoP-up, etc | | | | |
| Video Detection Video Motion Detection, Camera Blank | | | | | |

| Video/Audio output | | | | | |
|------------------------|--|---|-----------------------------|--|--|
| | 1-ch, resolution: | 1-ch, resolution: | | | |
| HDMI / VGA output | 1080P:1920×1080×60Hz UXGA:1600×1200×60Hz SXGA:1280×1024×60Hz, 720P:280×720×60Hz, XGA:1024×768×60Hz | 1080P : 1920×1080×60 1280×1024×60Hz, 1280×720×60Hz, 1024×768×60Hz | OHz, SXGA: 720P: XGA: | | |
| Stream type | Video, Video & Audio | | | | |
| | Playback & Ba | ackup | | | |
| Sync Play Back | 1/4/8/16/32 | | | | |
| Search Mode | Time/Date, Alarm, Smart Search, etc | | | | |
| Play Back Function | Play, Pause, Stop, Rewind, Fast Play, slow play, next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Backup Selection, Digital Zoom | | | | |
| Backup Mode | lode USB Device / Network / eSATA Device | | | | |
| | Storage | | | | |
| Capacity | 4TB capacity / Higher | | | | |
| | Network inte | rface | | | |
| Network interface | face RJ45 100M / 1000M Ethernet interface | | | | |
| Network Function | HTTP,TCP/IP,IPV4/IPV6,UPnF | P,UDP,SMTP,NTP,DI | HCP,DNS,FTP | | |
| USB interface | USB2.0 /USB3.0 | | | | |
| | General | | | | |
| Working temperature | -10 °C ~ +55 °C | | | | |
| Working humidity | 10% ~ 90% | | | | |
| Dimensions (W × D × H) | 315 × 230 × 45 mm | 445 × 290 × 45mm | 445 × 290 × 45 mm | | |
| Certification | CE, FCC and UL | | | | |