NOTICE INVITING QUOTATION (NIQ)

Date: 16/01/15

Sealed quotations on company letterhead are invited from reputed manufacturers in India, abroad or their authorized suppliers/ dealers and service agents in India for the supply of the Camera and NVR set. The quotation must provide detailed information of the configuration and specifications of the items as well as price and terms and conditions of the payment. The quotation should mention the total cost of equipment, delivery, installation and commissioning and demonstration at IIT Delhi site.

The quotation should be submitted on or before 09th February, 2015 by 5:00 PM in the office of the Head, Department of Civil Engineering, Room No. 221, Block No. IV, Indian Institute of Technology Delhi, Hauz Khas, New Delhi - 110 016 (INDIA). The validity of the submitted quotation must extend up to at least three months. Interested parties are required to submit their technical and financial bids in separately sealed envelopes and marked respectively as “Technical Bid” and “Financial Bid” on the outside.

The two envelopes should be enclosed inside a single large envelope and marked, “ATTN: Dr. Dipti Ranjan Sahoo, Sealed Quotation for CAMERA AND NVR SET to be opened by Purchase Committee”.

General Guidelines

This product shall be manufactured by a make whose quality system is in compliance with the ISO-14001. ISO certificate from OEM to be attached. All systems and components must be in compliance with FCC/CE and UL and RoHs requirements. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer’s system.

All systems and components shall have been thoroughly tested and proven in actual use. In case the bidder is authorized reseller or channel partner an authorization letter from the OEM need to be submitted in original. Compliance statement for the specifications under needed to be attached; deviation & remarks need to mention clearly.

Datasheet to be attached, Demonstration to be given as and when required. Schedule for the same will be informed in advance. OEM should have online dedicated CCTV support center available during working hours and a fully equipped repair and maintenance office in India. Document details to be submitted for the same.

Technical Specifications.

<table>
<thead>
<tr>
<th>1.</th>
<th>2 MP (Full HD) OUTDOOR NETWORK IR HIGH SPEED PTZ CAMERA</th>
<th>05 Nos.</th>
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<tbody>
<tr>
<td>• Sensor: 1/2.8” Progressive Scan CMOS or better</td>
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<td>• Min. Illumination:</td>
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<tr>
<td>• -Color : 0.4 lux (F1.6,1/30 sec, 50 IRE, AGC on), B/W : 0.03 lux (F1.6,1/30 sec, 50 IRE, AGC on), 0 lux with IR</td>
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<tr>
<td>• Color : 0.05 lux (F1.6,1/1 sec, 50 IRE, AGC on), B/W : 0.005 lux (F1.6,1/1 sec, 50 IRE, AGC on), 0 lux with IR</td>
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</table>
• AGC: Auto / Manual
• S / N Ratio: $\geq 50$dB
• Digital Noise Reduction: 3D DNR
• Backlight Compensation: HLC / BLC
• Wide Dynamic Range: Yes
• Focal Length: 4.3 ~ 129mm
• Optical zoom: 30X
• Digital Zoom: 16X
• Angle of View: 65.5 ~ 2.11 degree (Wide-Tele)
• Smart tracking: Support
• Pan / Tilt Range: Pan: 360° endless; Tilt: -2° ~ 90° (Auto Flip )
• Pan / Tilt Speed: Pan Manual Speed: 0.1° ~ 160°/s, Pan Preset Speed: 240°/s
• Tilt Manual Speed: 0.1° ~ 120°/s, Tilt Preset Speed: 200°/s
• Number of Preset: 300
• Patrol: 8 patrols, up to 32 presets per patrol
• Four patterns with the recording time not less than 10 minutes per pattern
• Smart IR Support and IR Distance up to 150 meter
• Streams Three Streams
• Anti-haze: Yes, Function should improve the whole image’s visibility and clarity even in very foggy weather to capture the vehicle image clearly with wiper for self cleaning.
• Power: 24VAC: Max. 50W (heater: 20W)
• Working Temperature: -30°C ~ 65°C(-22°F ~ 149°F)
• Humidity: 90% or less
• Protection Level: IP66 standard
• TVS 4,000V lightning protection, surge protection and voltage transient protection

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<th>2</th>
<th>NETWORK VIDEO RECORDER</th>
<th>01 No.</th>
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<tr>
<td>HDMI/VGA output at up to 1920×1080P resolution</td>
<td>32 Channel Video Inputs with incoming bandwidth of minimum 160mbps.</td>
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<tr>
<td>• Support live view, storage and playback of video at 5.0 Megapixel resolution.</td>
<td>• Realize instant playback for assigned channel during multi-channel display mode.</td>
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<tr>
<td>• Digital zoom in live view and playback mode.</td>
<td>• Up to 16-ch synchronous playback.</td>
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<tr>
<td>• Searching record files and captured pictures by events (alarm input/motion detection), searching and playing back by tags.</td>
<td>• HDD quota management; different capacity can be assigned to different channel.</td>
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<tr>
<td>• 1 self-adaptive 10M/100M/1000M network interface.</td>
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</table>
- IPv6 is supported, TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, and iSCSI are supported.
- H.264 video compression with high reliability and superior definition.
- Independent configuration for each channel, including resolution, frame rate, bit rate, image quality, etc.
- The video input/output quality is configurable.
- Each channel supports two kinds of compression parameters, the normal continuous and event, which can be configured locally.
- Encoding for both audio/video composite stream and video stream; audio and video synchronization during composite stream encoding.
- 1/4/6/8/9/16 screen live view is supported, and the display sequence of screens is adjustable.
- Live view screen can be switched in group, and manual switch and automatic cycle review is also provided, the interval of automatic cycle can be adjusted.
- Quick setting menu is provided for live view.
- The selected live view channel can be shielded.
- Motion detection, tamper-proof, video exception alert and video loss alert functions.
- Privacy mask.
- Several PTZ protocols supported; PTZ preset, patrol and pattern.
- Zooming in by clicking the mouse and PTZ tracing by dragging mouse.
- 16 SATA hard disks interface and each disk is with a maximum of 4TB storage capacity with RAID 0,1,5,10 supported, 2 eSATA interfaces
- HDD group management, Support HDD standby function.
- Cycle and non-cycle recording mode.
- Normal and event video encoding parameters.
- Multiple recording types: manual, continuous, alarm, motion, motion alarm, motion & alarm.
- 8 recording time periods with separated recording types.
- Pre-record and post-record for alarm, motion detection for recording or capture, and pre-record time for schedule and manual recording.
- Searching record files and captured pictures by events (alarm input/motion detection).
- Customization of tags, searching and playing back by tags.
- Locking and unlocking record files.
- Local redundant recording and capture.
- Searching and playing back record files by channel number, recording type, start time, end time, etc.
- Zooming in for any area when playback.
- Supports pause, play reversely, speed up, speed down, skip forward, and skip backward when playback, locating by dragging
the mouse.
- Capture, continuous capture and picture playback.
- Export data by USB device, Export video clips when playback.
- Management and maintenance of exporting devices.
- Configurable arming time of alarm input/output.
- Alarm for video loss, motion detection, tampering, abnormal signal, different input and output video standard, illegal login, network disconnected, IP confliction, abnormal record/capture, HDD error, and HDD full, etc.
- Alarm triggers full screen monitoring, audio alarm, notifying surveillance center, sending email and alarm output.
- Automatic restore when system is abnormal.
- Users can operate by front panel, mouse, and the remote control.
- Three-level user management; admin user can create many operating account and define their limits of authority, which includes the limit to access any channel.
- Completeness of operation, alarm, exceptions and log writing and searching.
- Manual Triggering and clearing alarms.
- Input and output of configuration information of devices.
- 2 RJ-45 10 / 100 / 1000 Mbps self-adaptive Ethernet interfaces (3 x USB2.0, 16 Alarm in, Alarm out 4, Dual gigabit network interfaces)
- Remote search, playback, download, locking and unlocking the record files, and downloading files broken transfer resume.
- Remote parameters setup; remote import/export of device parameters.
- Remote viewing of the device status, system logs and alarm status.
- Remote HDD formatting and program upgrading, Restart and shutdown.
- RS-232, RS-485 transparent channel transmission.
- Alarm and exception information can be sent to the remote host
- Remotely start/stop recording, start/stop alarm output, PTZ control.
- Remote JPEG capture
- Two-way voice talk and voice broadcasting, Embedded WEB server.

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<th>3</th>
<th>NETWORK KEYBOARD</th>
<th>01 No.</th>
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<tr>
<td>Network keyboard with 7” TFT touch screen at 800×480 resolution</td>
<td>Speed dome, video decoder &amp; NVR control</td>
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<td></td>
<td>1-ch HD video stream decoding at 1080p</td>
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<td></td>
<td>Support 15 users, and each can operate up to 256 devices</td>
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<td></td>
<td>USB 2.0 interface for video backup</td>
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<p>| 4 | STANDARD 8 PORT POE SWITCH | 01 No. |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>42” STANDARD LCD TV</td>
<td>01 No.</td>
</tr>
<tr>
<td>6</td>
<td>Wall mount stands (extra) for PTZ camera</td>
<td>05 Nos.</td>
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<tr>
<td>7</td>
<td>Cat-6 Cables</td>
<td>500 M</td>
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NOTES:

Terms of Conditions:

- A complete set of Manuals for operation, maintenance and safety should be provided. All Documents and Manuals should be in English language.
- Documentation related to guarantee/warranty of equipment to be provided in the name of IIT Delhi.
- Each of the essential specification needs to be responded. Bidder should also provide the timeframe of the delivery. Failure to respond to any essential specification can lead to disqualification.
- Vendor should have supplied FIVE similar equipment within India. A detailed reference of supply of equipment must be provided along with the bids. Any negative comments from any one referred would disqualify the bid. IIT Delhi reserves the right to interact/visit with the referred customer as per its convenience.
- The cost should include installation, deputation of competent engineers for installation and systems required for smooth running of the equipment.
- Pre-installation requirements, if any, should be mentioned along with their detailed technical specifications. All these items should be provided within 2 weeks of Supply Order placement so that IIT Delhi can prepare the installation requirements well in time.
- Vendor is required to supply, install and ensure proper commissioning of the equipment within 30 days of the Supply Order.
- The supplier should demonstrate the performance of the equipment to the specifications by conducting trial tests at the Structures Laboratory.
- The cost should be FOB basis.
- Comprehensive warranty of one year is required.
- The Institute reserves the right to accept/reject any/all the offers without assigning any reason whatsoever.

(Dr. D. R. Sahoo)  (Prof. A. K. Jain)  (Dr. Vasant Matsagar)  (Dr. A. Ganguli)