

Bill of Quantity (BOQ)

To Damak Municipality,
Office of Municipal Executive
Damak, Jhapa
Koshi Province, Nepal

Subject: Rate Submission for CCTV in Ward No. 3

| SN | Item | Unit | Qty | Unit Price | Unit Price in Words | Total |
|-----------------------|---|-------|-----|------------|---------------------|-------|
| 1 | Electricity Concentric Cable 10mm | meter | 550 | | | |
| 2 | 4MP IP Bullet Color Camera (4mm) Location: Baghkhori Chowk (3) Aamchowk(3), Dhukurpani Chowk 3, Golatar Chowk (3), Mawa Bridge(2) | pcs | 14 | | | |
| 3 | 32 Channel 4K NVR | pcs | 1 | | | |
| 4 | Pole Mount Bracket Branded | pcs | 14 | | | |
| 5 | 4 TB Surveillance Hard disk | pcs | 1 | | | |
| 6 | Installation(Water proof Junction Box(ABS Material size min 290*215mm, depth 84mm)-1pcs, 1 DPMCB 6A, Power Supply Unit(12V, 10A) 1pcs, and all other required items like cat6, electric wires etc) | site | 5 | | | |
| 7 | Optical Fiber Lease (GPON) (4 port ONU , Fiber Drop Cable, etc shall) and AMC Charge for 1 Year) 3 spot | ls | 1 | | | |
| Total | | | | | | |
| VAT 13% | | | | | | |
| Total with VAT | | | | | | |

Submitted By:

Signature:

Name of Designation of:

Signatory:

Firms Name:

Seal of the Firm:

"Industrial, Touristic and Green City, Clean, Safe and Prosperous City"



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Technical Compliance Sheet for 4MP IP Bullet Cammer

| Feature | Specification | Compliance (Fully Compliant, Partially Compliant, Non Compliant) or Bidders Offer |
|-------------------------------|--|--|
| Manufacture, Country | To filled by Bidder | |
| Brand Name | To filled by Bidder | |
| Model No. | To filled by Bidder | |
| Image Sensor | 1/3" Progressive Scan CMOS | |
| Max. Resolution | 2560 × 1440 | |
| Min. Illumination | Color: 0.001 Lux @(F1.0, AGC ON), 0 Lux with white light | |
| Shutter Time | 1/3 s to 1/100, 000 s | |
| Day & Night | 24/7 Color | |
| Angle Adjustment | Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360° | |
| Focal Length & FOV | 2.8 mm, horizontal FOV 96.5°, vertical FOV 50.8°, diagonal FOV 113.9° | |
| Aperture | F1.0 | |
| Supplement Light Range | White light Up to 30 m | |
| Main Stream | 50 Hz: 20 fps (2560 × 1440) 25 fps (1920 × 1080, 1280 × 720) | |
| Sub-Stream | 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) | |
| Video Compression | Main stream: H.265/H.264 Sub-stream: H.265/H.264/MJPEG | |
| Protocols | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP™, SMTP, IGMP, 802.1X, QoS, IPv6, Bonjour, IPv4, UDP, SSL/TLS | |
| API | Open Network Video Interface, ISAPI | |
| Region Of Interest | (ROI)1 fixed region for main stream | |
| Audio Compression | G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/AAC, Environment Noise Filtering-UF: Yes | |
| Image | WDR 120 DB, Image Enhancement BLC, 3D DNR, Saturation, brightness, contrast, sharpness, AGC, white balance adjustable by client software or web browser. | |
| Ethernet Interface | 1 RJ45 10 M/100 M self-adaptive Ethernet port | |
| Basic Event | Motion detection, video tampering alarm, exception | |
| Power | 12 VDC ± 25%, 0.4 A, PoE: 802.3af, Class 3, 36 V to 57 V, 0.2 A to 0.15 A, | |
| Protection | IP67 | |



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Technical Compliance Sheet for 4K NVR 32 Channel

| Feature | Specification | Compliance (Fully Compliant, Partially Compliant, Non Compliant) or Bidders Offer |
|--|---|--|
| Manufacture, Country | To filled by Bidder | |
| Brand Name | To filled by Bidder | |
| Model No. | To filled by Bidder | |
| Video Compression/Format | H.265/ H.265+/ H.264+/ H.264 | |
| Video Output (VGA) | 1-ch, 1920 1080/60 Hz, 1280 1024/60 Hz, 1280 720/60 Hz | |
| Video Output (HDMI) | 1-ch, 4K (3840 2160)/30 Hz, 2K (2560 1440)/60 Hz, 1920 1080/60 Hz, 1600 1200 /60 Hz, 1280 1024/60 Hz, 1280 720/60 Hz, 1024 768/60 Hz | |
| Video Recording Res. | 1920 x 1080 | |
| Max. Video Recording Res. | 3840 x 2160 | |
| IP Video Input | 32-ch | |
| Audio Input Channel (RCA) | 1 Channel RCA | |
| Audio Compression | G.711ulaw/G.711alaw/G.722/G.726/AAC | |
| Audio Output Channel | 1 Channel RCA | |
| Two way Audio | 1-ch, RCA (Linear, 1 KΩ) | |
| Stream Type | Video, Video & Audio | |
| Live View / Playback Resolution | 12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF | |
| Decoding Capability | AI on: 1-ch@12 MP (30 fps)/2-ch@8 MP (30 fps)/4-ch@4 MP (30 fps)/8-ch@1080p (30 fps), AI off: 2-ch@12 MP (30 fps)/3-ch@8 MP (30 fps)/6-ch@4 MP (30 fps)/ 12-ch@1080p (30 fps) | |
| Synchronous Playback | 16-ch | |
| Network Protocol | TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP, HTTP, HTTPS | |
| Number HDD Interface (SATA) | 2 SATA | |
| Max HDD Support (GB,TB) | Up to 10TB capacity for each HDD | |
| Max. Storage Support | 20TB | |
| Network Interface (RJ45) | 1 RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface | |
| USB Port | Front panel: 1 x USB 2.0; Rear panel: 1 x USB 2.0 | |
| Remote Connections | 128 | |
| Video Detection | Motion Detection 2.0 | |
| Power Supply | 12 VDC, 3.3 A | |
| Approx. Power Consumption | < 15 W (without HDD) | |
| API | ONVIF (profile S/G); SDK; ISAPI | |



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Technical Compliance Sheet for 4TB Surveillance HDD

| <i>Feature, Specification</i> | | <i>Compliance (Fully Compliant, Partially Compliant, Non Compliant) or Bidders Offer</i> |
|---|---------------------|--|
| Manufacture, Country | To filled by Bidder | |
| Brand Name | To filled by Bidder | |
| Model No. | To filled by Bidder | |
| Capacities | 4TB / 4000GB | |
| Interface | SATA 6Gb/s | |
| FEATURES AND PERFORMANCE | | |
| Drive Bays Supported | 8+ | |
| Cameras Supported | Up to 64 | |
| Max Sustained Transfer Rate OD (MB/s) | 190 | |
| Cache (MB) | 64 | |
| RELIABILITY/DATA INTEGRITY | | |
| Tarnish Resistant | Yes | |
| Load/Unload Cycles | 300,000 | |
| Nonrecoverable Read Errors Rate, Max | 1 per 10E14 | |
| Power-On Hours per year | 8760 | |
| Workload Rate Limit (WRL) | 180 | |
| Mean Time Between Failures (MTBF) (hours) | 1M | |
| POWER MANAGEMENT | | |
| Startup Current, Typical (12V, A) | 1.8 | |
| Average Operating Power (W) | 5.5 | |
| Idle Average (W) | 3.2 | |
| Standby Mode/Sleep Mode, Typical (W) | 0.25/0.25 | |
| Voltage Tollerance (5V) | ±5% | |
| Voltage Tolerance (12V) | ±10% | |
| ENVIRONMENTAL/TEMPERATURE | | |
| Operating (ambient, min °C) | 0 | |
| Operating (drive case, max °C) | 70 | |
| Nonoperating (ambient, min °C) | -40 | |