

Dhangadhi Sub-Metropolitan City

Dhangadhi, Kailali

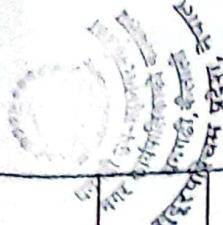
Bill of Quantities (BoQ)

Prakash
प्रमुख प्रशासकीय अधिकृत

महानगरपालिकाको
नगर कार्यपालिकाको
सचिवालय, कैलाली,
सिरपछिम प्रदेश, नेपाल

S.No.	Product Description	Quantity	Unit	Price per Unit	Total Price (In Number)	Total Price (In Words)
1	32 Channel NVR	1	Pcs.			
2	Infrared 2MP IP Bullet Camera	12	Pcs.			
3	4 Port PoE Switch	3	Pcs.			
4	8 Port PoE Switch	2	Pcs.			
5	8 Port Gigabit Switch	1	Pcs.			
6	Cat 6 Outdoor UTP Cable	2	Box			
7	6 TB Surveillance HDD	1	Pcs.			
8	Media Converter 100/1000	2	Pair			

9	55" 4K Smart Television	1	Pcs.			
10	Fiber Optic Junction Box	2	Pcs.			
11	6U Network Rack	1	Set			
12	Listics and Other Accessories	1	Job			
13	CCTV Installation Job	1	Set			
Total						
VAT (+13%)						
Sub-Total						



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Stamp of Firm/Company:

Signature of Authorized Person:

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CCTV, NVR, and Switch, TV and Other Accessories Specification

S. No.	Description	Minimum Specification
Infrared 2MP IP Bullet Camera		
1	Item Type	Infrared 2MP IP Bullet Camera
2	Image Sensor	1/2.7" CMOS sensor or better
3	Max Resolution	1920 x 1080 or better
5	Day and Night	IR cut filter
12	Day/Night Autoswitch	Yes
6	Angle Adjustment	Pan: 0 to 360 degrees or better Tilt: 0 to 75 degrees or better Rotate: 0 to 360 degrees or better
7	Focal Length	2.8mm or better
8	Iris Type	Fixed
9	Audio	Mono Sound
10	Illuminator	Infrared
11	Illumination Range	Upto 30 mtr. or better
12	Interface	1xRJ45 10M/100M Ethernet interface(Power over Ethernet)
13	Video Bit Rate	32Kbps to 8Mbps or better
14	Video Compression	H.265/H.265+/H.264/H.264+ or better
15	Network Protocols	TCP/IP,HTTP,HTTPS,FTP,DHCP,DNS or better
16	Warranty	2 years of Full Warranty
32 Channel NVR		
1	Item Type	32 channel NVR
2	Incoming Bandwidth	300 Mbps or better
3	Outgoing Bandwidth	160Mbps or better
4	HDMI Output Resolution	4K, 2K, FHD, HD or more at 60Hz or better
5	VGA Output Resolution	FHD, HD or more at 60Hz or better
6	Audio Output	1-channel or better
7	Decoding	H.265/H.265+/H.264/H.264+ or more

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8	Recording Resolution	8MP, 6MP, 5MP, 4MP, 3MP, or more
9	Synchronous Playback	32-channel
10	Network Protocols	TCP/IP, DHCP, DNS, DDNS, NTP, SMTP, HTTPS or more
11	Stream Type	Video, Video and Audio
12	SATA Interfaces	4 (4 HDD Supported)
13	Capacity	10TB or more for each SATA interface
14	USB Interface	2 x USB 2.0 or more
15	Warranty	1 years of Full Warranty

4 Port PoE Switch

S. No.	Description	Minimum Specification
1	LED Indicators	Power, Active, 10/100M, 1000M, PoE
2	Network Interface	4 x 10/100/1000Mbps RJ-45 PoE Ports
3	Uplink Port	1 or more
4	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3x or better
5	Power	Supports Hi-PoE upto (60 W) or more.
6	MAC address Capacity	Auto-learning and Aging Capacity
7	Extended Distance Supported	Minimum 250 Mtr or above.
8	Enclosure	Metal Enclosure
9	Temperature Operating:	0~45 Degree °C
11	Storage	-40~70 Degree °C or better
10	Humidity Operating	10~90% (Non-condensing)
12	Warranty	1 years of Full Warranty

8 Port PoE Switch

S. No.	Description	Minimum Specification
1	LED Indicators	Power, Active, 10/100M, 1000M, PoE
2	Network Interface	8 x 10/100/1000Mbps RJ-45 PoE Ports
3	Uplink Port	2 (Min. 2)
4	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3x or better
5	Power	Supports Hi-PoE upto (60 W) or more.
6	MAC address Capacity	Auto-learning and Aging Capacity
7	Extended Distance Supported	Minimum 250 Mtr or above.

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8	Enclosure	Metal Enclosure
9	Temperature Operating:	0~45 Degree °C
11	Storage	-40~70 Degree °C or better
10	Humidity Operating	10~90% (Non-condensing)
12	Warranty	1 years of Full Warranty

8 Port Gigabit Switch (Unmanaged)

S. No.	Description	Minimum Specification
1	System requirements	Works with any operating systems
2	Led Indicator	1*Power, power supply indicator, 8*Link/Act indicators
3	Network Interface	10/100/1000Mbps RJ-45 Port
4	Downlink Ports	8*10/100/1000Base-T RJ-45(Auto-MDI/MDI-X)
5	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.1P/Q, IEEE 802.3az or better
6	Transmission speed	10/100/1000Mbps Half/Full Duplex Mode
7	Power Adaptor	External power adapter
8	MAC address Capacity	Auto-learning and Aging Capacity
9	Extended Distance Supported	Minimum 250 Mtr or above.
10	Enclosure	Metal Enclosure
11	Temperature Operating:	-10°C~45°C, 10%~90% (Non-condensation)
12	Storage	-40°C~70°C, 5%~90% (Non-condensation)
13	Warranty	1 years of Full Warranty

Cat 6 Outdoor UTP Cable

S. No.	Description	Minimum Specification
1	Cable Type	Cat 6 Outdoor UTP (Unshield Twisted Pair) Cable
2	Conductor Material	Semi-Copper or Better
3	Jacket	Weatherproof and UV-Resistant
4	Data Transfer Rate Support	Supports upto 1 Gbps
5	Bandwidth	Upto 250 MHz
6	Distance Supported Max	Upto 150 Mtr.
7	Warranty	1 years of Full Warranty

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6 TB Surveillance HDD		
S. No.	Description	Minimum Specification
1	Hard Disk Interface	Serial ATA
2	Hard Disk Form Factor	3.5 Inches
3	Compatible Devices	Desktop
4	Installation Type	Internal Hard Drive
5	Special Feature	Portable
6	Hard Disk Size	6 TB
7	Hard Disk Rotational Speed	5400 RPM
8	Compatible Devices	PC, Camera
9	Read/Write Speed	Minimum 180 MB/s or above
10	Operating Temperature	32 to 149°F / 0 to 65°C
11	Storage Temperature	-40 to 158°F / -40 to 70°C
12	Warranty	1 years of Full Warranty

Media Converter 100/1000

S. No.	Description	Minimum Specification
1	Hardware Specifications	1000M Ethernet Media Converter
2	Model	10/100/1000m Fiber to Ethernet Media Converter Bi-Directional Single Mode – Support upto 20km or better
3	Input Supply Voltage	5V or better
4	Indicators	Power / TST Fiber link on / Receive activity (LKF)/Fiber Duplex (FDF)/Copper Duplex (FDC) / 10/100/1000 Speed
5	Operating Temperature	0°C to 50°C (32°F to 122°F) or better
6	Storage Temperature	Minimum range of -25°C to 70°C (-13°F to 158°F) or better
7	Operating Humidity	5% to 90% non-condensing
8	Storage Humidity:	5% to 95% non-condensing :
9	Chassis	Metal with an IP20 ingress protection rating
10	Laser Safety	EN 60825-1
11	Warranty	1 years of Full Warranty

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Fiber Optic Junction Box		
S. No.	Description	Minimum Specification
1	Max. Inlet Cable Diameter	15mm or better
2	Inlet Cable Number	1 uncut cable port or better
3	Max. Outlet Cable Diameter	2×3mm or better
4	Outlet Cable Number	8 pcs or better
5	Protection Grade	IP65
6	Installation Method	Wall mounting and pole mounting (back plate and pole ring compulsory)
7	Working Environment	Outdoor and indoor
8	Dimension	420(H)*320(W)*125(D)mm
9	Working Temperature	-20°C~+60°C
10	Storage Temperature	-40°C~+70°C
11	Relative Humidity	0%~95%
12	Air Pressure	70~106KPa
13	Warranty	1 years of Full Warranty
55" 4K Smart Television		
S. No.	Description	Minimum Specification
1	Screen size(inches/cm)	55"
2	Display Panel	A+ Grade Panel- 4K
3	Resolution	4K Ultra HD (2160p / 3840x2160) resolution
4	Android Version	Android 9.0
5	Body	Frameless or Better
6	Memory	2GB RAM, 16GB ROM
7	Ports	USB: 2 or more HDMI: 2 or more
8	Connectivity	Built in Wi-Fi / Bluetooth Supported or better
9	Jack	Pc Audio In. A/V (Rca In, 1 Earphone Out).
10	Speaker	Inbuilt Woofer (Dolby surround) Audio: 20W, Stereo Sound

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11	Sound system	ATV:BG, DK, I,NICAM/A2 DTV:MPEG-T layer 1/2,MPEG-2 layer 2/AC3/EAC3
12	Video Supported	Upto 8K Video Support
13	Video decoding	MPEG-2, MPEG-4, H.265.Main @L5.1-1920*1080@60fps
14	Annual energy consumption	Normal: ≤ 70 kWh or better Standby power consumption: ≤ 0.50 W or better
15	Accessories	Voice Remote, User Manual, 2*AAA battery, stand, wall Mount.
16	Warranty	3 Year Warranty

6U Network Rack

S. No.	Description	Minimum Specification
1	Dimensions	6U 19", 355x600x440 mm, (H x W x D), 3770mm working depth, (distance between bars and rear panel)
2	Type	Wall-Mounted (Welded body)
3	Door	4mm toughened glass, removable sides or better
4	Cable entry	Top & Bottom
5	Mounting profiles	1 pair (front)
6	Fan openings	Yes
7	Colour	Black or Grey
8	Protection degree	IP 20
9	Additional Equipment	3 sets of fixing screws in the holes of the supporting rails and a set of four screws for wall mounting Detachable Side Panel with Lock
10	Warranty	1 Years Warranty

Listics and Other Accessories

S. No.	Description	Minimum Specification
1	Listic	Listic (whichever applicable) including cable tie / sockets cable clamps and necessary connecting & fixing materials.
	- 20 mm - 40 Pcs	
	- 40mm x 2"x5ft - 20 Pcs	
	- 50mm x 2"x5ft - 10 Pcs	
2	HDMI Cable	4K Supported - 5Mtr. Long

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3	Cable tie - 2 Pkt.	- 4.8mm Self-locking Nylon Cable Tie
		- Installation temperature: -10°C~85°C
		- Working Temperature: -30°C~85°C
4	RJ-45 - 50 Pcs.	Metal Coated RJ-45 jacks with RJ45 Cable Ends Connector Boots Cover
5	Power Socket with Box - 2 Pcs	- Voltage: 240 V
		- With 20 Aps
		- Number of Pins: 2
		- Durable and safe for everywhere
		- 16 AMP
6	Warranty	1 Years Warranty
CCTV Installation Job		
S. No.	Description	TOR
1	Installation of CCTV inside District Administration Office Premises	Bidder is responsible for installation of CCTV Camera and all other devices inside District Administration Office as per the directives of the office. All the equipment fitting and installation jobs should be completed under the directive and supervision of Technical Staff of DAO. Eligible bidder is solely responsible of managing all the necessary tools during the installation of CCTV.

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Narendra Bahadur Khati

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