

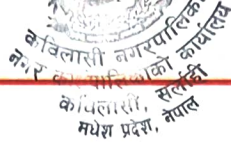


कविलासी नगरपालिका

नगर कार्यपालिकाको कार्यालय

कविलासी, सर्लाही

२०७४



मधेश प्रदेश, नेपाल

पत्र संख्या : २०८२/१०८३

चलानी नं. : १९६६

मिति : २०८३/०२/११

श्री सम्पूर्ण आपूर्तिक फर्महरू,

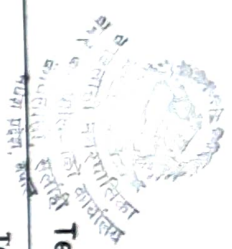
विषय: CCTV क्यामराको लागि परिमार्जित दररेट सूचना।

प्रस्तुत विषयमा यस नगरपालिका नगर कार्यपालिकाको कार्यालयको प.स. २०८२/०८३ च.नं. १६३५ मिति २०८३/०२/०५ गतेको सी.सी.टी.भी. क्यामराको लागत अनुमानको लागि बजार दर रेट पेश गर्ने सूचनालाई प्राविधिक विवरण र specification सहित परिमार्जन गर्नुपर्ने भएकाले सोको म्याद तीन दिन थप गरिएको छ।

तपशिल

Item	Description	specification	unit	Quantity	Unit price (without VAT)	Total amount	Remarks
1	CCTV Camera Installation	As per attached specification	set	1			

२०८३/०२/११
राज किशोर महतो
वि. प्रमुख प्रशासकीय अधिकृत



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Technical Specification Of CCTV Camera

Date: _____
Signature: _____
Official Stamp: _____

S.N.	Item	Technical Specification of 4MP ANPR speed detection Camera	Remarks
	Brand	..... (Should be mentioned by bidder)	
	Model	..... (Should be mentioned by bidder)	
	Image Sensor	≥ 1/1.8" CMOS	
	Focal Length	8 mm-32 mm or better	
	Min. Illumination	0.0005 Lux or better	
	Image Resolution	2688 × 1520 or higher	
	Video Frame Rate	25 fps or better	
	Capture speed range	5 - 120 km/h	
	Capture Rate/Accuracy	≥ 98%	
	Speed Detection Range	up to 120km/h	
	Speed detection distance	Up to 100 m	
	Lane Coverage	Min: 2 lanes	
	Supplement Light	White Light/Warm light	
	Supplement Light Distance	50m or better	
	Wide Dynamic Range	140 dB or better	
	Storage	Should support SD card up to 256 GB Must include 128 GB SD Card with system	
	ONVIF	Profile S, Profile G, Profile T, ProfileM	
	Target Detection	Motor vehicle, non-motor vehicle	
	Vehicle Plate Recognition	Support Nepali license plates recognition.	
	Vehicle Type Recognition	Bus, SUV, MPV, pickup, heavy truck, medium truck, van, Motorcycle, Tricycle or more	
	Vehicle Color Recognition	White, pink, black, red, yellow, gray, blue, green, purple, brown, or more	
	Incident Detection	traffic congestion, speeding, low-speed driving, Lane change, stopped vehicle, wrong-way driving or more	
	Blacklist and Whitelist vehicles	≥ 50000 records	
	Network Port	1 x 10/100/1000M Ethernet Ports or better	
	Interfaces	1/1 alarm input/output, 2 relays, 1 RS-485 or better	
	Power	12V - 24V DC, PoE	
	Protection	IP67, IK10	
	Operating Temperature	-30 °C to 70 °C or better	
	Operating Humidity	upto 95% or better	

4MP ANPR speed
1 detection Camera

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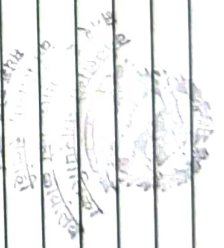
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Date: _____

	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.
	<p align="center">2 Supplement Light</p>	<p align="center">Technical Specification of Supplement Light</p> <p>.....(Should be mentioned by bidder)</p> <p>.....(Should be mentioned by bidder)</p> <p>Should have built-in automatic light control</p> <p>Should support ambient brightness detection</p> <p>Should automatically start-up at low illumination</p> <p>Min. 2 lanes</p> <p>≥ 16</p> <p>White Light</p> <p>Visible Light</p> <p>≥ 25m</p> <p>3000 K ± 10% (warm light for less eye strain and avoid glare)</p> <p>Should support ambient brightness detection and automatically start-up at low illumination</p> <p>Min. IP66</p> <p>100V-240 VAC</p> <p>≤ 35W</p> <p>Temperature: -40 °C to 70 °C or better</p> <p>Must be fully compatible with ANPR Camera</p> <p>Proper mounting bracket and all other necessary accessories must be included.</p> <p>Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.</p> <p>CE, CB, LVD</p>
3	32 Channel 4K NVR 4 Sata	<p align="center">Minimum Technical Specification of 32 Channel NVR</p> <p>Brand(Should be mentioned by bidder)</p> <p>Model(Should be mentioned by bidder)</p> <p>IP Video Input 32-ch or better</p> <p>Incoming / Outgoing Bandwidth 164Mbps / 256 Mbps or better</p> <p>HDMI Output upto 4K or better</p> <p>VGA Output upto 1080p or better</p> <p>Video Decoding Format H.265+, H.265 or better</p> <p>Recording Resolution upto 32MP or better</p> <p>Decoding Capability upto 32-ch @ 1080p(30fps) or better</p> <p>Network Protocol IPv4, IPv6, TCP/IP, DHCP, NTP, UPnP, DNS, DDNS, HTTPS, SMTP, NFS, iSCSI, ONVIF</p>

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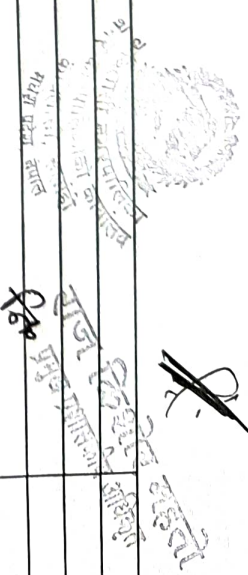
Ethernet Interface	2 x 10/100/1000 Mbps or better	
Storage Capacity	4 SATA interface with 16TB per HDD or better	
USB Interface	USB 3.0 X 1 and USB 2.0 each x 2	
Alarm In/out	16/4 or better	
Power Consumption	≤ 30 W or lower	
Working Temperature	14 °F to 131 ° or better	
Smart/AI Features	Face recognition, Smart Motion Detection, Perimeter protection, People Counting, ANPR and various Analytics by camera or more functions	
Warranty	Minimum 1 Years	
Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid	
Minimum Technical Specification of 4 port Gigabit Switch		
Brand	.....(Should be mentioned by bidder)	
Model	.....(Should be mentioned by bidder)	
Ports	4 x 10/100/1000 Mbps PoE port, and 2 x Gigabit SFP port	
MAC Address Table	2 K or better	
Switching Capacity	12 Gbps or better	
Packet Forwarding Rate	8.928 Mpps or better	
Flash Memory	1 Mbits or better	
PoE Standard	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt	
PoE Power Budget	65W or better	
Operating Temp/Humidity	-22 °F to 149°F, 5% to 95%	
PoE Extension	Uto 300m	
Port Isolation	Should support	
PoE Watchdog	Should support	
Surge Protection	±6 kV	
Warranty	Minimum 1 Years	
Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, and Compliance Sheet by bidder must be submitted along with the bid.	
At least one poe port should support 60 watt output.		
Technical Specification Of 16 port PoE Switch		
Brand	.....(Should be mentioned by bidder)	
Model	.....(Should be mentioned by bidder)	
Shell	Metal material	
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)	

4 port Gigabit
Harsh PoE Switch



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	Video & Audio Input	HDMI x 1
	Video & Audio Output	LINE OUT x 1
	Control Interface	RS232 x 1
	Power Supply	100-240 V~, 50/60 Hz, 1.0A Max
	Power Consumption	≤74W
	Standby Consumption	≤ 0.5 W
	Working Temperature	0 °C to 50 °C (41 °F to 104 °F)
	Working Humidity	20% to 90% RH (Non-Condensing)
	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.
	Technical Specification Of Hoop & Bracket For Bullet Camera	
	Brand	..... (Should be mentioned by bidder)
	Model	..... (Should be mentioned by bidder)
	Material	Galvanized steel sheet and Steel(sus304)
	Operating Temperature	160 mm x 114 mm x 40mm
	Technical Specification Of Hoop & Bracket For ANPR Camera	
	Brand	..... (Should be mentioned by bidder)
	Model	..... (Should be mentioned by bidder)
	Appearance	Platinum Gray
	Material	Anti-corrosion:316L Stainless Steel
	Dimension	PT Joint
	Technical Specification Of 22" 9U Rack	
	Brand	..... (Should be mentioned by bidder)
	Model	..... (Should be mentioned by bidder)
	Brand	Specified by the Bidder
	Model	Specified by the Bidder
	Mount Type	Desktop /Wall-Mount
	Material	Cold Rolled Steel or better
	Load Bearing	≥60kg
	Surface Finish	Depregasing, Pickling, Phosphoric, Powder Coated
	Thickness	Mounting Profile minimum 1.5mm or greater and mounting angle minimum 1.2mm or greater
	Technical Specification Of Fiber 6 Core messenger Cable	
	Brand	..... (Should be mentioned by bidder)
	Model	..... (Should be mentioned by bidder)
	Brand	Specified by the Bidder
7	Hoop & Bracket For Supplement Light	
8	Hoop & Bracket For ANPR Camera	
9	22" 9U Rack	



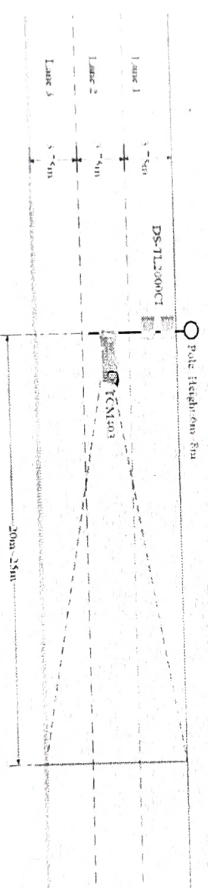
10	Fiber 6 Core messenger Cable	Model	Specified by the Bidder
	Messenger Wire		At least 3, Wire Thickness: Min 0.5 mm Sheath: Min 1.0 mm or Better
	Loose Tube		Material: PBT filled with jelly Outer diameter: Min 2mm or Better
	Armoring		Material: Corrugated steel tape Armor steel number: Min 6 Units or More
	Outer sheath		Material: PE Thickness: Min 1.5 mm or Better
	Temperature Dependency		Operating temperature: 0 to 60 °C or better Temperature Dependency: ≤0.1 dB/Km

Shell	Technical Specification Of Pole With Camera Mounting Structure
	The bidder must submit the structural Design and design for smart check point location(s): as specified in BoQ where ANPR Camera, Continuous light, and other accessories will be installed. The structural design must have a minimum of six meters ground clearance with HDG (Hot Dip Galvanizing Surface Protection) robust steel pole in U-Shaped or L-Shaped or better for Overhead Camera/Navigation control as required. The Structure to be constructed should be made in a strong manner so that they do not shake while moving vehicles with proper Earthing System.

1.3.1 Center Mounting (Recommended)

Middle installation is able to provide the most ideal condition. The installation guidance is as follow.

1. Install the camera at the middle position of the lanes. Then adjust vertical angle to an appropriate view. The referenced distance of the view is about 80~100 m. Finally, adjust the angel of rotation to make sure all the lanes are vertical in the view.
- II. The camera supports vehicle counting no matter it is detecting the head or the tail of vehicle.

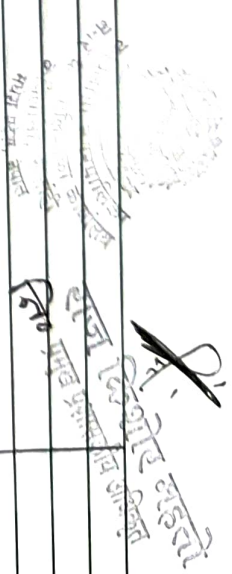


Technical Specification Of Hard disk

Brand	.....(Should be mentioned by bidder)
Model	.....(Should be mentioned by bidder)
Series	Purple
Hardware Platform	PC
Operating System	Windows 10, Windows 8.1, Windows 7, macOS High Sierra, Sierra, El Capitan
Item Weight	15.5 ounces
Product Dimensions	5.8 x 4 x 1 inches
Item Dimensions LxWxH	5.8 x 4 x 1 inches
Flash Memory Size	6 TB
Hard Drive Interface	Serial ATA-600

11	Pole With Camera Mounting Structure
12	Hardisk

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	Hard Drive Rotational Speed	5400 RPM	
	Warranty	Minimum 1 Years	
13	Pole BOX	metal boxes for hiding wire connections, often 4x4 or 6x6 inches	
14	SFP 1.25G Dual Fiber 1310/1550 20 KM LC Type	SFP package with LC connector 1310nm FP Laser and 1550nm PIN photo detector 1550nm FP Laser and 1310nm PIN photo detector	
15	Battery 150VA with Pole Box Enclosure		
		Technical Specification Of 16 port PoE Switch	
	Brand	.....(Should be mentioned by bidder)	
	Model	.....(Should be mentioned by bidder)	
	Capacity	150 Ah	
	Dimensions	503*193*412 (L*B*H ±5mm)	
	Initial Charging Current (Amps)	11	
	Volts	12V	
	Mounting Hardware	The box should come with heavy-duty strut clamps capable of securing the enclosure firmly to wood, concrete, or metal poles.	
	Warranty	24 Months*	
		Technical Specification Of 16 port PoE Switch	
	Brand	.....(Should be mentioned by bidder)	
	Model	.....(Should be mentioned by bidder)	
	Capacity	900 VA	
	System Voltage	12 V DC (requires 1 battery)	
	Output Waveform	Pure Sine Wave (safe for sensitive electronics)	
	Input Voltage Range	90V - 290V (Wide Input range)	
	Solar Panel Capacity (Solar PCU)	Up to 500W	
	Charging Technology	PWM (Pulse Width Modulation)	
	Chargeover Time	Less than 10ms (UPS Mode)	
	Battery Compatibility	Tubular, Lead Acid	
	Mounting Hardware	The box should come with heavy-duty strut clamps capable of securing the enclosure firmly to wood, concrete, or metal poles.	
	Warranty	1 years	
17	Installation and Commissioning for ANPR	Supplier is liable to install the required system in complete manner for the smooth operation with all required accessories required at the time of installation if any missing in the BoQ. Supplier should provide minimum 3 days of training to the organization concerned department.	

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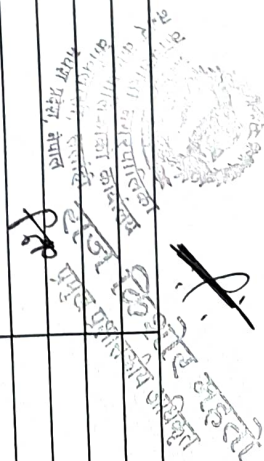
	Warranty	Minimum 1 Years
	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid
		Technical Specification of 16 Channel NVR
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	IP Video Input	16-ch or better
	Incoming / Outgoing Bandwidth	160 Mbps or better
	HDMI Output	upto 4K or better
	VGA Output	1-ch, 1920 × 1080/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz or better
	Video Decoding Format	H.265+, H.265 or better
	Recording Resolution	upto 8MP or better
	Decoding Capability	upto 16-ch @ 1080p(30fps) or better
	Network Protocol	TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS
	Ethernet Interface	1, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface or better
	Storage Capacity	1 SATA interface per HDD or better
	USB Interface	2 × USB 2.0
	Power Consumption	≤ 50 W or lower
	Working Temperature	-10 °C to 55 °C (14 °F to 131 °F) or better
	Warranty	Minimum 1 Years
	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.
		The NVR must support AI-based smart video search system and AI-based quick search function in all channels with compatible cameras
		Technical Specification of 8 port Gigabit Switch
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	Ports	8 × Gigabit PoE port, 1 × Gigabit RJ45 port, 1
	MAC Address Table	4 K or better
	Switching Capacity	20 Gbps or better
	Packet Forwarding Rate	14.88 Mpps or better
	Flash Memory	1.5 Mbits or better
	PoE Standard	IEEE 802.3af; IEEE 802.3at
20	16 Channel NVR	
21	8 port Gigabit PoE Switch	

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	POE Power Budget	58W or better	
	Operating Temp/Humidity	0 °C to 40 °C (32 °F to 104 °F)	
	PoE Extension	Up to 300m	
	Surge Protection	±6 kV	
	Warranty	Minimum 1 Years	
	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, and Compliance Sheet by bidder must be submitted along with the bid.	
	At least one poe port should support 60 watt output.		
	Technical Specification Of Hard disk		
	Brand	..... (Should be mentioned by bidder)	
	Model	..... (Should be mentioned by bidder)	
	Series	Purple	
	Hardware Platform	PC	
	Operating System	Windows 10, Windows 8.1, Windows 7, macOS High Sierra, Sierra, El Capitan	
	Item Weight	15.5 ounces	
	Product Dimensions	5.8 x 4 x 1 inches	
	Item Dimensions LxWxH	5.8 x 4 x 1 inches	
	Flash Memory Size	2 TB	
	Hard Drive Interface	Serial ATA-600	
	Hard Drive Rotational Speed	5400 RPM	
	Warranty	Minimum 1 Years	
	Technical Specification of 22 inch monitor		
	Brand	..... (Should be mentioned by bidder)	
	Model	..... (Should be mentioned by bidder)	
	Minimum Technical Specification		
	Screen Size	21.5inch	
	Active Display Area	478,656 (H) mm x 260,28 (V) mm	
	Resolution	1920 x 1080	
	Backlight	E-LED (EdgeLight System)	
	Pixel Pitch	0.0831 (H) mm x 0.241 (V) mm	
	Brightness	250 cd/m ²	
	Viewing Angle	178° / 178°	
	Color Depth	16.7 M	
	Contrast Ratio	3000:01:00	
	Response Time	5 ms (typ)	
23	Monitor 22 Inch		
22	Hardisk		

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		Refresh Rate	60 Hz
		Color Gamut	72% NTSC
		Reliability	7 *16H
		Video & Audio Input	HDMI x 1
		Video & Audio Output	LINE OUT x 1
		Power Supply	100-240 VAC, 50/60 Hz
		Power Consumption	≤22W
		Standby Consumption	≤ 0.5 W
		Working Temperature	0 °C to 40 °C (32 °F to 104 °F)
		Working Humidity	10% to 90% RH (Non-Condensing)
		Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.
		Technical Specification Of Cat 6 Cable	
		Brand	.....(Should be mentioned by bidder)
		Model	.....(Should be mentioned by bidder)
		Core Color	1 White- Blue /Blue 2 White-Orange /Orange,3 White-Green /Green 4 White- Brown /Brown,
		Material	0.565±0.005
		Thickness	0.55±0.05 mm or Better
		External O.D.	6.2±0.4 mm
		Surface	Clean,Frap,Satiation
		Material	Solid-Bare Copper,Content 99.95%,
		Letter height	3.0±0.3mm or Better
		Sheath Physical Properties	Before Aging Tensile Strength (Mpa) ≥13.5, Elongation(%) ≥150,Aging Period (°C×hrs) 100°C×24h×10d,After Aging Tensile Strength(Mpa) ≥12.5, Elongation(%) ≥125,Gold bend(-20±2°C×4h) 8×Cable O.D. No visible cracks,
24	Cat 6 Cable Pure Copper		
25	Installation , Materials and Accessories	CCTV Camera Installation 22 Pcs In 2 Difference Place With Listic and Other Accessories Installation and configuration with all required accessories for setup. In case of involving accessories such as pole mount bracket, extra switch and similar items, the responsibilities for management and provision shall lie with the bidder.	