

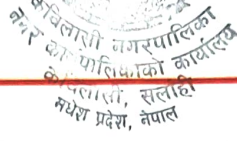


कविलासी नगरपालिका

नगर कार्यपालिकाको कार्यालय

कविलासी, सर्लाही

२०७४



मधेश प्रदेश, नेपाल

पत्र संख्या : २०७४/०७३

चलानी नं. : १६९४

मिति : २०७४/०७/१३

श्री सम्पूर्ण आपूर्तिक फर्महरू,

विषय: CCTV क्यामराको लागि परिमार्जित दररेट सम्बन्धी सूचना ।

प्रस्तुत बिषयमा नगर कार्यपालिकाको कार्यालयको प.स. २०८२/०८३ च.नं. १६७७ मिति २०८३/०२/११ को सी.सी.टी.भी. क्यामराको लागत अनुमान पेश गर्ने म्याद बजार दर रेट प्राप्त नभएकोले प्राविधिक विवरण र संशोधित स्पेसिफिकेसन सहित सूचना परिमार्जन गरी पुनः ५ (पाच) दिन म्याद थप गरिएको व्यहोरा अनुरोध छ ।

तपशिल

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

२०७४/०७/१३
नि.प्रमुख प्रशासनाध्यक्ष अधिकृत

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Minimum Technical Specification for CCTV Camera

S.N.	Item	Technical Specification of 4MP ANPR speed detection Camera or better	Remarks
		Brand	.....(Should be mentioned by bidder)
		Model	.....(Should be mentioned by bidder)
		Image Sensor	1/1.8" progressive scan CMOS or better
		Focal Length	8 mm-32 mm or suitable for road distance
		Min. Illumination	0.0001 Lux or better
		Image Resolution	2688 × 1520 or higher
		Video Frame Rate	25 fps or higher
		Capture speed range	5km/h-160 km/h or better
		Capture Rate /Accuracy	≥ 98%
		Speed Detection Range	up to 120Km/h or better
		Speed detection distance	up to 100 meter or better
		Lane Coverage	1-2 lanes or better
		Supplement Light	White Light/Warm light
		Supplement Light Distance	50m or better
		Wide Dynamic Range	120 dB or better
		Storage	
		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 RJ45 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	Minimum IP68, IK10 or better
		Operating Temperature	-30 °C to 70 °C or better
		Operating Humidity	10%-90% RH, Non-condensing
1	4MP ANPR speed detection Camera		

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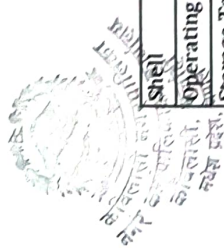
	<p>Documents Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.</p>
	<p>Technical Specification of Supplement Light or better .....(Should be mentioned by bidder) .....(Should be mentioned by bidder) Should have built-in automatic light control Should support ambient brightness detection Should automatically start-up at low illumination Min. 2 lanes or better 16m to 25 or better White Light Visible Light 10m to 30m or better 3000 K ± 10% (warm light for less eye strain and avoid glare) Should support ambient brightness detection and automatically start-up at low illumination Min. IP66 or better 100V-240 VAC or suitable 15w-60w or better Temperature: -40 °C to 70 °C or better Must be fully compatible with ANPR Camera Proper mounting bracket and all other necessary accessories must be included. Please submit the product datasheet, ISO certificate, and Manufacturer Authorization Certificate (in the manufacturer's format or attached). A warranty letter must accompany the bid. Failure to provide these documents will result in a non-responsive bid. CE, CB, LVD</p>
2	<p>Supplement Light</p>
3	<p>32 Channel 4K NVR 4 Sata Minimum Technical Specification of 32 Channel NVR or better(Should be mentioned by bidder)(Should be mentioned by bidder) 32-ch or better 164Mbps / 256 Mbps or better upto 4K or better upto 1080p or better H.265+, H.265 or better upto 32MP or better upto 32-ch @ 1080p(30fps) or better</p>

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	<p>Network Protocol Ethernet Interface Storage Capacity USB Interface Alarm In/out Power Consumption Working Temperature Smart/AI Features Warranty Documents</p>	<p>TCP, IPv6, TCP/IP, DHCP, NTP, UPnP, DNS, DDNS, HTTPS, SMTP, NFS, iSCSI, ONVIF 2 x 10/100/1000 Mbps or better 8 SATA III interface with 16TB per HDD or better 4 ports USB 3.0 X 1 and USB 2.0 each x 2 16/4 or better ≤ 30 W or lower 14 °F to 131 ° or better Face recognition, Smart Motion Detection, Perimeter protection, People Counting, ANPR and various Analytics by camera or more functions Minimum 1 Years Please submit the product datasheet, ISO certificate, and Manufacturer Authorization Certificate (in the manufacturer's format or attached). A warranty letter must accompany the bid. Failure to provide these documents will result in a non-responsive bid.</p>
	<p>Brand Model Ports MAC Address Table Switching Capacity Packet Forwarding Rate Flash Memory PoE Standard PoE Power Budget Operating Temp/Humidity PoE Extension Port Isolation PoE Watchdog Surge Protection Warranty Documents</p>	<p>Minimum Technical Specification of 4 port Gigabit Switch or better .....(Should be mentioned by bidder) .....(Should be mentioned by bidder) 4 x 10/100/1000 Mbps PoE port, and 2 x Gigabit SFP port 2 K or better 12 Gbps or better 8.928 Mpps or better 1 Mbits or better IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt 65W or better -22 °F to 149°F, 5% to 95% Uto 300m Should support Should support ±6 KV Minimum 1 Years Please submit the product datasheet, ISO certificate, and Manufacturer Authorization Certificate (in the manufacturer's format or attached). A warranty letter must accompany the bid. Failure to provide these documents will result in a non-responsive bid.</p>
4	4 port Gigabit harsh POE Switch	
	<p>Brand Model</p>	<p>Technical Specification Of 16 port PoE Switch or better(Should be mentioned by bidder)(Should be mentioned by bidder)</p>

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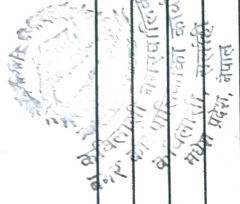
	Shell	Metal material
	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
	Storage Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
	Operating Humidity	5% to 95% (no condensation)
	Relative Humidity	5% to 95% (no condensation)
	Power Supply	100-240 V AC, 50/60 Hz, Max. 2.5 A or better
	Max. Power Consumption	150 W or better
	Surge Protection	6 kV or better
5	16 port Gigabyte PoE Switch	16 x 1000M PoE port or better
	Uplink Ports	2 x 1G SFP port or better
	MAC Address Table	8K or better
	Switching Capacity	36 Gbps or higher
	Packet Forwarding Rate	25 Mpps or higher
	Internal Cache	4 Mbits or more
	PoE Standard	IEEE 802.3af/at or more
	PoE Power Budget	125 W or better
	Certification	CE, FCC, RoHS
	Documents	Please submit the product datasheet, ISO certificate, and Manufacturer Authorization Certificate (in the manufacturer's format or attached). A warranty letter must accompany the bid. Failure to provide these documents will result in a non-responsive bid.
		Technical Specification of Monitor 43 Inch or better
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	Minimum Technical Specification	
	Screen Size	43 inch
	Active Display Area	940.896 (H) mm x 529.254 (V) mm
	Resolution	1920 x 1080 or better
	Backlight	D-LED
	Pixel Pitch	0.49 (H) mm x 0.49 (V) mm
	Brightness	360 cd/m2
	Viewing Angle	178° / 178°
	Color Depth	8 bit+ 16.7 M
	Contrast Ratio	1200:01:00
	Response Time	8 ms (typ)
6	Monitor 43 Inch	60 Hz



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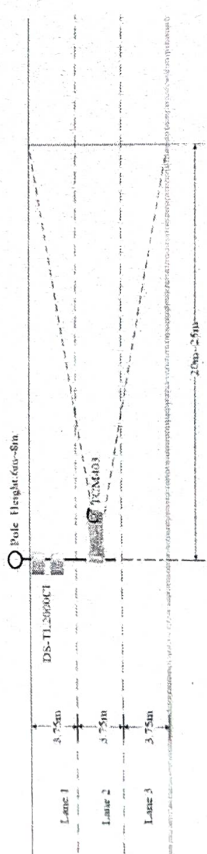
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20-01-2021



		1%
	Color Gamut	68% NTSC
	Reliability	7 *24H
	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	Please submit the product datasheet, ISO certificate, and Manufacturer Authorization Certificate (in the manufacturer's format or attached). A warranty letter must accompany the bid. Failure to provide these documents will result in a non-responsive bid.
		Technical Specification Of Hoop & Bracket For Bullet Camera or better
	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 or better
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	Appearance	Platinum Gray or better
	Material	Anti-corrosion:316L Stainless Steel
	Dimension	PT Joint
		Technical Specification Of 22" 9U Rack or better
	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	Degreasing, Pickling, Phosphoric, Powder Coated
	Thickness	Mounting Profile minimum 1.5mm or greater and mounting angle minimum 1.2mm or greater
7	Hoop & Bracket For Supplement Light	
8	Hoop & Bracket For ANPR Camera	
9	22" 9U Rack	

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	<p align="center">Technical Specification Of Fiber 6 Core messenger Cable or better(Should be mentioned by bidder)</p> <p>.....(Should be mentioned by bidder)</p> <p>Specified by the Bidder</p> <p>Specified by the Bidder</p> <p>At least 3, Wire Thickness: Min 0.5 mm Sheath: Min 1.0 mm or Better</p> <p>Material: PBT filled with jelly Outer diameter: Min 2mm or Better</p> <p>Material: Corrugated steel tape Armor steel number: Min 6 Units or More</p> <p>Material: PE Thickness: Min 1.5 mm or Better</p> <p>Operating temperature: 0 to 60 °C or better Temperature Dependency: ≤0.1 dB/Km</p>
<p align="center">Technical Specification Of Pole With Camera Mounting Structure or better</p> <p>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.</p>	<p align="center">1.3.1 Center Mounting (Recommended)</p> <p>Middle installation is able to provide the most ideal condition. The installation guidance is as follow.</p> <ol style="list-style-type: none"> I. 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.  <p align="center">Pole Height: 6m-8m</p> <p align="center">Figure 1-3 Middle installation</p>
<p align="center">Technical Specification Of Hard disk or better</p> <p>.....(Should be mentioned by bidder)</p> <p>.....(Should be mentioned by bidder)</p> <p>General series or better</p> <p>PC</p> <p>Windows 10, Windows 8.1, Windows 7, macOS High Sierra, Sierra, El Capitan</p> <p>15.5 ounces</p>	<p align="center">12 Hardisk</p>

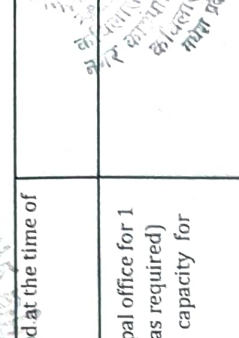
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		Product Dimensions	5.8 x 4 x 1 inches
		Item Dimensions LxWxH	5.8 x 4 x 1 inches
		Flash Memory Size	6 TB
		Hard Drive Interface	Serial ATA-600 or better
		Hard Drive Rotational Speed	5400 RPM
		Warranty	Minimum 1 Years
13	Pole BOX	metal boxes for 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 150AH with Pole Box Enclosure	<p align="center">Technical Specification Of 16 port PoE Switch or better</p> <p>.....(Should be mentioned by bidder)</p> <p>.....(Should be mentioned by bidder)</p> <p>150 Ah or better</p> <p>503*193*412 (L*B*H ±5mm) or better</p> <p>11</p> <p>12V</p> <p>The box should come with heavy-duty strut clamps capable of securing the enclosure firmly to wood, concrete, or metal poles.</p> <p>24 Months</p>	
16	Invertor 900VA with Pole Box Enclosure	<p align="center">Technical Specification Of 16 port PoE Switch or better</p> <p>.....(Should be mentioned by bidder)</p> <p>.....(Should be mentioned by bidder)</p> <p>900 VA</p> <p>12 V DC (requires 1 battery)</p> <p>Pure Sine Wave (safe for sensitive electronics)</p> <p>90V - 290V (Wide Input range)</p> <p>Up to 500W</p> <p>PWM (Pulse Width Modulation)</p> <p>Less than 10ms (UPS Mode)</p> <p>Tubular, Lead Acid</p> <p>The box should come with heavy-duty strut clamps capable of securing the enclosure firmly to wood, concrete, or metal poles.</p> <p>1 years</p>	

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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.
18	Materials and Accessories For ANPR System	The power solution option will be provided by the municipality it self at a nearby electric pole for 2 locations and from the municipal office for 1 location. Other materials required for Outdoor: concentric type suitable power cable for offer solutions. Cable size (6mm to 10mm as required) should be recommended as per calculation for various length and load. Indoor: multistrand cable with suitable size as per load capacity for indoor application Proposed cable should be suitable for the solutions. All required Multiplug, Power Cable, Cable Connector; DB/MCCB should be provided. Power accessories like Power Socket, Power- Cord, Multiplug, PDU(atleast 6 Port for each U Rack) etc. Should be provide as per site requirement and necessity with clean installation
19	6 MP full color Camera or better	<p align="center">Technical Specification of 6 MP Camera or better</p> <p>Brand(Should be mentioned by bidder)</p> <p>Model(Should be mentioned by bidder)</p> <p>Image Sensor 1/3" Progressive Scan CMOS or better</p> <p>Resolution 3200 × 1800 or better</p> <p>Focal Length 3.6mm or better</p> <p>Day/Night IR-cut filter or Auto ICR</p> <p>Illumination Color: 0.001 Lux @ (F1.0, AGC ON),0 Lux with light or better</p> <p>WDR yes</p> <p>Supplement Light Type IR and White Light</p> <p>Supplement Light Range ≥ 30m or better</p> <p>Video Compression H.264, H.265 or better</p> <p>Video Bit Rate 32 Kbps to 8 Mbps or higher</p> <p>Image Enhancement BLC,HLC and more</p> <p>Protocol TCP/IP, ICMP, DHCP, DNS, HTTP, RTP, RTSP,UDP, SMTP or more</p> <p>Power 12VDC, PoE</p> <p>Communication Interface 1 Port 10M/100M RJ-45 Interface or better Speed Ethernet Port.</p> <p>ONVIF Support</p> <p>Smart/IT Features Should support perimeter protection and more, Line Crossing, human and vehical detection or more</p> <p>Users ≥ 10 with three level: admin, operator and user</p> <p>Power Consumption < 7.5 W</p> <p>Audio Support Include Built-in mic</p> <p>Operating Temperature Minimum -30°C to 60°C or better</p> <p>Protections IP67 or better</p> <p>Language English Language Support</p>



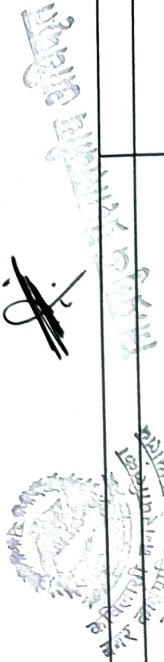
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	Warranty	Minimum 1 Years
	Documents	Product datasheet, ISO Certificate, Manufacturer Authorization Certificate, Warranty Letter, and Compliance Sheet must be submitted along with the bid.
	Technical Specification of 16 Channel NVR or better	
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	IP Video Input	16-ch or better
	Incoming / Outgoing Bandwidth	80 Mbps or better
	HDMI Output	upto 4K or better
	VGA Output	1-ch, 1920 × 1080, 1440 × 900, 1280 × 720, 1024x768 or better
	Video Decoding Format	H.265+, H.265 or better
	Recording Resolution	upto 8MP or better
	Decoding Capability	1 ch 4k 15fps:8ch@5.0 MP/4.0MP/1080P/960P/720P 25fps or better
	Network Protocol	TCP/IP, DHCP, UDP, SMTP, NTP or better
	Ethernet Interface	s
	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 or better	
	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
	PoE Power Budget	58W or better
20	16 Channel NVR	
21	8 port Gigabit POE Switch	

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	Operating Temp/Humidity	0 °C to 40 °C (32 °F to 104 °F)
	PoE Extension	Upto 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 or better	
	Brand	.....(Should be mentioned by bidder)
	Model	.....(Should be mentioned by bidder)
	Series	General series or better
	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	4TB
	Hard Drive Interface	Serial ATA-600
	Hard Drive Rotational Speed	5400 RPM
	Warranty	Minimum 1 Years
	Technical Specification of 22 inch monitor or better	
	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)
	Refresh Rate	60 Hz
22 Hardisk		
23 Monitor 22 Inch		

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	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 or better
	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, Cold bend(-20±2°C×4h) 8×Cable O.D., No visible cracks,
24	Cat 6 Cable Pure Copper	
25	Installation , Materials and Accessories	Install and configure 22 CCTV cameras across two locations, including all necessary accessories. The bidder is responsible for providing and managing additional accessories like pole mount brackets or extra switches.