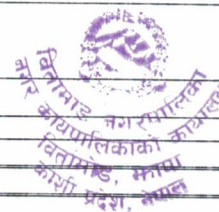


CCTV Camera Specifications



1. PTZ 4MP IP AI Starlight Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	4MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	4GB
RAM	1GB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005Lux@F1.6B/W: 0.0005Lux@F1.60Lux@F1.6 (IR light on)
IR Distance	100 m (328.08 ft)
IR On/Off Control	Zoom Prio/Manual/SmartIR
IR LEDs Number	4

Lens

Focal Length	4.8 mm–120 mm
Max. Aperture	F1.6–F4.0
Field of View	H: 60.0°–2.5°; V: 30.8°–2.2°; D: 66.7°–2.9°
Optical Zoom	25x
Focus Control	Auto/Semi-Auto/Manual
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)
Iris Control	Auto/Manual
DORI Distance	Detect Observe Recognize Identify
	2540 m (8333.33 ft) 1016 m (3333.33 ft) 508 m (1666.67 ft) 254 m (833.33 ft)

PTZ	
Pan/Tilt Range	Pan: 0°–360° (endless)Tilt: -15°–90° (auto flip 180°)
Manual Control Speed	Pan: 0.1°–200°/sTilt: 0.1°–120°/s
Preset Speed	Pan: 240°/s Tilt: 200°/s
Presets	300
Tour	8 (up to 32 presets per tour)
Pattern Number	5
Scanning Number	5
Speed Adjustment	Support
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SDP/Co-P/D (auto recognition)

General Intelligence	
Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
General Intelligence	Object Abandoned/Missing

Artificial Intelligence

Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
SMD	Support
Video Metadata	Support human, motor vehicle and non-motor vehicle image capture.

Video	
Compression	H.265+/H.265/H.264+/H.264/MJPEG (sub stream)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 1080P (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Frame Rate	Main stream: 4MP/3MP/1080P/1.3MP/720P (1–25fps)Sub stream 1: D1/CIF (1–25fps)Sub stream 2: 1080P/1.3MP/720P (1–25fps)
Bit Rate Control	Variable Bit Rate/Constant Bit Rate
Bit Rate	H.265/H.264: 3 kbps–20480 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Support
WDR	120 dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Track/Manual/Sodium lamp/Natural light/Street lamp
Gain Control	Auto/Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detection	Support
Region of Interest	Support
Electronic Image Stabilization	Support

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Electronic Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
Audio	
Compression	G.711a; G.711Mu; AAC; G.722.1; G.726; MPEG2-Layer2; G.729
Network	
Ethernet	RJ-45 (10/100Base-T)
4G Network Type	LTE/WCDMA/GSM
4G Frequency Band	LTE FDD: Band 1/2/3/4/7WCDMA: Dual-band Band 1/2GSM: 1800Hz/1900MHz
Protocol	IPv4; IPv6; HTTP; HTTPS; SSL; TCP/IP; UDP; UPnP; ICMP; IGMP; SNMPv1/v2c/v3(MIB-2); ARP; RTCP; RTSP; RTP; SMTP; NTP; DHCP; DNS; PPPOE; DDNS; FTP; IP Filter; QoS; Bonjour; 802.1x
Interoperability	ONVIF Profile S&G; CGI
Streaming Method	Unicast/Multicast
User/Host	19
Edge Storage	NAS; Local PC; Micro SD card (256G)
Browser	IE7 and newer versionsChrome 45 and earlier versionsFirefox 52 and earlier versionsSafari (no version restrictions)
Smart Phone	IOS/Android
Certification	
Certifications	CE: EN55032/EN55024/EN50130-4FCC: Part15 subpartB, ANSI C63.4-2014UL: UL60950-1+CAN/CSA C22.2, No. 60950-1
Port	
Audio In	1
Audio Out	1
Alarm Port	2/1
Power	
Power Supply	DC 12V/3APoE+ (802.3at)
Power Consumption	13W21W (IR on)
Environment	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	≤95%
Ingress Protection	IP66; TVS 6000V lightning proof; Surge protection
Structure	
Casing	Aluminium alloy ADC12
Dimensions	Φ160 mm × 295 mm (6.30" × 11.61")
Net Weight	3 kg (6.61 lb)
Gross Weight	4.8kg (10.58lb)

2. 4MP IP Motorized Camera

Technical Specification	
Image Sensor	1/3 "4Megapixel progressive CMOS
Max. Resolution	2688 (H) × 1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s~1/100000 s
S/N Ratio	> 56 dB
Min. Illumination	0.03 Lux @ F1.7
Illumination Distance	50 m (164.0 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°~360°
	Tilt: 0°~90°
	Rotation: 0°~360°

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Lens

Lens Type	Motorized vari-focal				
Mount Type	φ14				
Focal Length	2.8 mm–12 mm				
Max. Aperture	F1.7				
Field of View	Horizontal: 98°–31° Vertical: 55°–18° Diagonal: 116°–36°				
Iris Type	Fixed				
Close Focus Distance	0.8 m (2.6 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	66.0 m (183.7 ft)	26.4 m (73.5 ft)	13.2 m (36.7 ft)	6.6 m (18.4 ft)
	T	200.0 m (656.2 ft)	80.0 m (262.5 ft)	40.0m (131.2 ft)	20.0 m (65.6 ft)

Video

Video Compression	H.265; H.264; H.264B; MJPEG (only supported by sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Video Frame Rate	Main Stream: 2688 × 1520 (1 fps–20 fps) 2560 × 1440 (1 fps–25/30 fps) Sub Stream: 704 × 576 (1 fps–20/25 fps) 704 × 480 (1 fps–20/30 fps)
Stream Capability	2 streams
Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Manual/Auto
Noise Reduction	3D NR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Alarm

Alarm Event	Network disconnection; IP conflict; motion detection; video tampering; illegal access; voltage detection; security exception; defocus detection;
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Network

Network	RJ-45 (10/100 Base-T)
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SDK and API
Cyber Security
Protocol
Interoperability
User/Host
Storage
Browser
Mobile Phone

Yes
Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour
ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
20
FTP; SFTP; Micro SD card (support max. 256 GB); NAS
IEChromeFirefox
IOS; Android

Certification

Certifications
CE-LVD: EN62368-1CE-EMC: Electromagnetic Compatibility Directive 2014/30/EUFCC: 47 CFR FCC Part 15, Subpart B

Power

Power Supply
12V DC/POE (802.3af)

3. 4 Port PoE Switch

Ports
4X10/100/1000Mbps PoE ports (RJ45)
1X10/100/1000Mbps uplink ports (RJ45)
1X10/100/1000Mbps uplink ports (SFP)
2000Mbps Full Duplex; 10 or 100 or 1000Mbps Half Duplex
Bandwidth: 12.0Gbps
Transmission Rate
Performance
Specification

Network Latency (10 to 1000Mbps): $\leq 16\mu s$ (use the 64byte package size)
MAC address table: 8K
The Frame Filter & Transmission Rate: 14800pps the most for 10M port, 148800pps the most for 100M port, 1488000pps the most for 1000M port
Networking
Standard
IEEE 802.3i 10BASE-T

IEEE 802.3u 100BASE-TX/ IEEE 802.3ab 1000BASE-T
IEEE 802.3xFlowControl
IEEE 802.3af/at/bt Power over Ethernet
Power Support
Power input: AC 110~220V 65W
Power output: PoE1~3Port: 1/2(+52V), 3/6(GND)
PoE4 Port: 1245(+53V), 3678(GND) compatible 1/2(+52V), 3/6(GND)
Size(L*W*H): 187mm*139mm*43mm
Operating Temperature: -30°C ~60°C
Physical Specifications
Working
Environment

Storage Temperature: -40°C ~70°C
Operating Humidity: 10%~90% non-condensing
Storage Humidity: 5%~90% non-condensing
Electromagnetic
Compatibility
CE mark

FCCPart15, Class B
VCCI ClassBEN55022 (CISPR 22)
C-Tick

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