

UN-BF2431

4MP Lite IR Fixed-focal Bullet Network Camera



- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs max. 4MP (2688 × 1520) @20 fps, and supports 2560×1440 (2560 × 1440) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 80 m
- RoI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, local alarm, voltage detection, audio detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 GB Micro SD card
- 12V DC/POE power support supply
- IP67 protection, IK10 protection (optional)

4Mp

WDR

Starlight

IVS

H.265+

IP67

United

Features and Functions

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, United smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

WDR

With advanced Wide Dynamic Range (WDR) technology, United network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Starlight

United Starlight technology mainly applies to the environment of low illuminance, and it can provide clear colorful video. Even in the environment of ultra-low illuminance, the technology can guarantee the good image effect.

IVS

With advanced video algorithm, United IVS technology supports intelligent functions, such as tripwire and intrusion.

Cyber Security

United network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device. With UL CAP Certification, TÜV Rheinland Protected Privacy IoT Product Certification, and ETSI EN 303645 Certification, United network camera better meets the demands of cyber security and privacy protection.

Protection (IP67, IK10, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.



Technical Specification

Camera

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–1/100,000 s
Min. Illumination	0.008 Lux@F1.6
S/N Ratio	> 56 dB
Illumination Distance	80 m (262.5 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	3.6 mm; 6 mm; 8 mm
Max. Aperture	3.6 mm: F1.6 6 mm: F1.6 8 mm: F1.6
Field of View	3.6 mm: Horizontal 84° × Vertical 45° × Diagonal 100° 6 mm: Horizontal 52° × Vertical 28° × Diagonal 61° 8 mm: Horizontal 40° × Vertical 23° × Diagonal 45°
Iris Type	Fixed
Close Focus Distance	3.6 mm: 1.4 m (4.6 ft) 6 mm: 3.1 m (10.2 ft) 8 mm: 4.9 m (16.1 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
		3.6 mm	80 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)
	6 mm	120.0 m (393.7 ft)	48.0 m (157.5 ft)	24.0 m (78.7 ft)	12.0 m (39.4 ft)
	8 mm	160.0 m (524.9 ft)	64.0 m (210.0 ft)	32.0 m (105.0 ft)	16.0m (52.5 ft)

Smart Event

IVS	Tripwire; intrusion
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Video

Video Compression	H.265; H.264; H.264B; MJPEG(only supported by the 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–25 fps) 704 × 480 (1 fps–30 fps)
Stream Capability	2 streams

Resolution	2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 3M (2048 × 1536); 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	Auto/Manual
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° (Supports 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G.726
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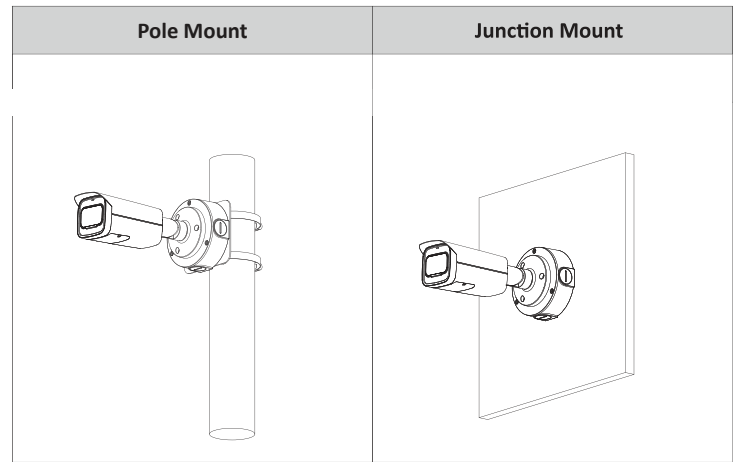
Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; security exception; local alarm
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Network

Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Cyber Security	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
Protocol	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
Interoperability	CGI; Milestone; Genetec; P2P
User/Host	20
Storage	FTP; SFTP; Micro SD Card (support max. 256 GB); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS

Mobile Phone	IOS; Android
Certification	
Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
Port	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V-5V DC
Alarm Output	1 channel out: 300mA 12V DC
Power	
Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 7.7W
Environment	
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than ≤ 95% RH
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67; IK10(optional)
Structure	
Casing	Metal
Dimensions	244.1 mm × Φ90.4 mm (9.61" × Φ3.26")
Net Weight	0.91 kg (2.0 lb)
Gross Weight	1.16 kg (2.6 lb)



Dimensions (mm/inch)

