

5MP Lite IR Fixed-focal Bullet Network Camera



- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @20 fps, and supports 2688 × 1520 (2688 × 1520) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max IR distance: 30 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 disconnected, IP conflict, illegal access voltage detection
- Supports max. 256 GB Micro SD card
- 12V DC/PoE power supply
- IP67 protection



System Overview

With upgraded H.265 encoding technology, WATASHI Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

Functions

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, WATASHI 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, WATASHI 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

With advanced image processing technology and optical technology, WATASHI Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

IVS

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

Cyber Security

WATASHI 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.

Protection (IP67, wide voltage)

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

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



Technical Specification

Camera

Image Sensor	1/2.7" 5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Min. Illumination	0.008 Lux@F1.6
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed				
Mount Type	M12				
Focal Length	3.6 mm				
Max. Aperture	F1.6				
Field of View	3.6 mm: Horizontal: 84.0° × Vertical 58.0° × Diagonal 110.0°				
Iris Type	Fixed aperture				
Close Focus Distance	3.6 mm: 1.6 m (3.61 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	56 m (183.73 ft)	22.4 m (73.49 ft)	11.2 m (36.75 ft)	5.6 m (18.37 ft)
	3.6 mm	80 m (262.47 ft)	32.0 m (104.99 ft)	16.0 m (52.49 ft)	8.0 m (26.25 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: 2592 × 1944 (1 fps-20 fps) 2688 × 1520 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)
Stream Capability	2 streams

Resolution	2592×1944(2592×1944); 2688×1520(2688×1520); 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–8192 Kbps H.265: 12 Kbps–8192 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 2592 × 1944 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; safety exception
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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	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec
User/Host	20
Storage	FTP; Micro SD card (support max. 256 G); NAS; SFTP
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
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Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 5.6W

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	IP67

Structure

Casing	Metal
Dimensions	166.2 mm × Ø70 mm (6.54" × Ø2.76")
Net Weight	0.48 kg (1.1 lb)
Gross Weight	0.57 kg (1.3 lb)

Accessories

Optional:



Junction Box



Pole Mount



DC12V1A
Power Adapter



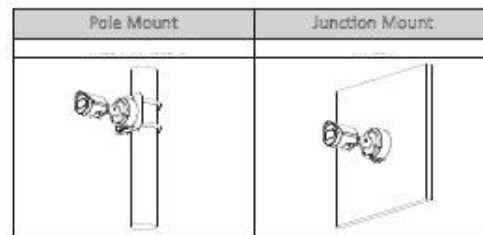
Single-port Long
Reach Ethernet over
Coax Extender



Integrated Mount
Tester



TLC SD Card



Dimensions (mm[inch])

