



FEATURES

- 4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520)@20 fps, and supports 2560 × 1440@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 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 monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
- Supports max. 256 G Micro SD card; built in MIC.
- 12 VDC/PoE power supply.
- IP67 protection.
- Smart Motion.

TECHNICAL SPECIFICATIONS

Camera	Image Sensor	1/2.9" 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	0.006 lux@F1.6 (Color, 30IRE) 0.0006 lux@F1.6 (B/W, 30IRE) 0 lux (Illuminator on)	
	S/N Ratio	> 56 dB	
	Illumination Distance	30 m (98.43 ft) (IR LED)	
	Illuminator On/Off Control	Auto / Manual	
Lens	Illuminator Number	1 (IR LED)	
	Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°	
	Lens Type	Fixed-focal	
	Mount Type	M12	
	Focal Length	2.8 mm; 3.6 mm	
	Max Aperture	F1.6	
	Field of View	2.8 mm: H: 95°; V: 52°; D: 114° 3.6 mm: H: 78°; V: 41°; D: 94°	
	Iris Control	Fixed	
	Close Focus Distance	2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (5.25 ft)	
DORI Distance	Lens	2.8 mm	3.6 mm
	Detect	63.6 m (208.66 ft)	85.4 m (280.18 ft)
	Observe	25.4 m (83.33 ft)	34.2 m (112.20 ft)
	Recognize	12.7 m (41.67 ft)	17.1 m (56.10 ft)
	Identify	6.4 m (20.99 ft)	8.5 m (27.89 ft)
Intelligence	IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)	
	Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos	
Video	Compression	H.264H; 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@ (1–20 fps)/ 2560 × 1440@ (1–25/30 fps) Sub stream: 704 × 576@ (1–25 fps)/ 704 × 480@ (1–30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.	
	Stream Capability	2 streams	
	Resolution	4M (2688 × 1520); 4M (2560 × 1440); 3M (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	

Video	White Balance	Auto; natural; street lamp; outdoor; manual; regional custom	
	Gain Control	Auto/Manual	
	Noise Reduction	3D DNR	
	Motion Detetion	OFF/ON (4 areas, rectangular)	
	Region of Interest (Rol)	Yes (4 areas)	
	Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)	
	Mirror	Yes	
	Privacy Masking	4 areas	
Audio	Built-in MIC	yes	
	Audio Compression	G.711a; G.711Mu; PCM; G.726	
Alarm	Alarm Event	No SD card; SD card full; SD card error; network disconnecton; IP detecton; video tampering; tripwire; intrusion; Smart Motion; voltage detecton; security excepton	
Network	Network Port	RJ-45 (10/100 Base-T)	
	SDK and API	Yes	
	Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP; P2P	
	Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI	
	User/Host	6 (Total bandwidth: 36 M)	
	Storage	FTP; SFTP; Micro SD card (support max. 256 GB)	
	Browser	IE; Chrome; Firefox	
	Management Software	DSS; MT Mobile	
	Mobile Phone	IOS, Android	
	Cyber Security	Configuration encryption;Trusted execution;Digest;Security logs;WSSE;Account lockout;syslog;Video encryption;802.1x;IP/MAC filtering;HTTPS;Trusted upgrade;Trusted boot;Generation and importing of X.509 certification	
Certifications		CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14	
Power	Power Supply	12 VDC/PoE (802.3af)	
	Power Consumption	Basic: 2.5 W (12 VDC); 3.3 W (PoE); Max. (ICR + H.265 + max. resolution + main stream + IR intensity + WDR + IVS): 4.2 W (12 VDC); 5.1 W (PoE)	
Environment	Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)	
	Operating Humidity	≤95%	
	Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)	
	Protection	IP67	
Structure	Casing	Inner core: Metal - Cover: Plastic	
	Product Dimensions	100.9 mm × Φ109.9 mm (3.97" × Φ4.33")	
	Net Weight	0.37 kg (0.82 lb)	
	Gross Weight	0.56 kg (1.23 lb)	