

- NDAA Compliance (The fully NDAA-compliant products are well suited for government, defense and a range of projects subject to the NDAA.)
- Precision Imaging Technology (Utilizing AA process and a high-performance day/night focus lens, it achieves stunning image quality with true-to-life clarity.)
- > Smart Hybrid Light (Auto-switching between IR and warm white light reduces light pollution and ensures full-color clarity, day or night.)
- Red and Blue Lights Deterrence (Upon detecting suspicious activity, automatically triggers a bright strobe light as a powerful visual deterrent.)
- ▶ Two-Way Audio (Dual microphones and a powerful speaker enable instant, clear communication for smarter, safer responses.)
- One-Click Arming & Disarming (Easily activate or deactivate alarm responses with a single click, ensuring smarter resource usage and greater operational flexibility.)
- ▶ Easy Remote Operation & Maintenance (The Milesight Device Portal makes remote management and maintenance simple and efficient.)

Night Vision with TrueColor Technology

Featuring a large sensor, wide aperture, 40m IR and 30m white warm lights, combined with advanced AI ISP and UTL correction technology, the camera delivers bright, low-noise images with enhanced shadow detail—ensuring true full-color performance even in challenging lighting conditions.



Active Deterrence with Smart Response

Combined with VCA 2.0 and MSense analytics, automatically switches from IR to TrueColor mode upon detecting human or vehicle motion. While red and blue flashing lights, paired with two-way audio, deliver real-time visual and audio deterrence, ensuring proactive intrusion prevention.



Smarter Detection, Greater Accuracy

Focused on person and vehicle classification using deep learning, the full suite of Al VCA 2.0 delivers ultra-low false alarm rates, supports long-range detection up to 75 meters, multi-target recognition, and small-object detection—ensuring robust physical security. Meanwhile, MSense provides intelligent trend analysis tailored for vertical business applications.



Compact Yet Robust Design

Milesight's One-Screwdriver design makes installation quick and easy. The camera integrates microphone, speaker, hybrid light, multiple interfaces, and supports up to 1TB SD card—all in a compact form. With IP67 water-proofing and IK10 vandal resistance, it performs reliably in any environment.





Camera	Model	MS-CQ8131-HYPG1	MS-CQ8231-HYPG1	
	Image Sensor	1/2.7" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS	
	Min. Illumination	0.004 lux@F1.0 (Color, 30 IRE) 0 lux (Illuminator on)	0.0008 Lux@F1.0 (Color, 30 IRE) 0 lux (Illuminator on)	
	WDR	120dB Super WDR		
	Shutter Time	1/100000s ~ 1s		
	Day/Night Mode	Day / Night / Auto / Customize / Schedule		
	DORI Distance	2.8mm: D: 89.5m O: 35m R: 17.5m I: 8.5m 4mm: D: 112m O: 44m R: 22m I: 11m	2.8mm: D: 91.5m O: 36m R: 18m I: 9m 4mm: D: 111m O: 43.5m R: 22m I: 11m	
	S/N	>56dB		
Illuminator	Illuminator Type	3 x Smart Hybrid Lights (Mixed IR and White Warm Lights)		
	IR Wave Length	850nm		
	Illumination Distance	Up to 40m (IR Light), Up to 30m (White Warm Light)		
illullillatoi	Illuminator On/Off Control	Auto, Manual		
	Smart Hybrid Lights	Support		
	Red and Blue Flashing Lights	1 x Red Light and 1 x Blue Light		
	Lens	2.8mm, 4mm		
	Aperture	F1.0		
Lens	Field of View	2.8mm: H:111° V:58.5° D:136° 4mm:H:92° V:50° D:108.5°	2.8mm: H:112° V:61.5° D:137° 4mm: H:93° V:49.5° D:111.5°	
	Close Focus Distance	2.8mm: 1m, 4mm:1.5m	2.8mm: 2m, 4mm:3m	
	Camera Angle Adjustment	Pan: 0° ~ 360°, Tilt: 0° ~ 90°, Rotation: 0° ~ 360°		
	Mount	M12	M16	
	Max. Image Resolution	3840x2160		
Video	Primary Stream	60Hz: 30fps@ (3840x2160, 3200x1800, 2688x1520, 1920x1080, 1280x720) 50Hz: 25fps@ (3840x2160, 3200x1800, 2688x1520, 1920x1080, 1280x720)		
	Secondary Stream	60Hz: 30fps@ (704x576, 640x480, 640x360) 50Hz: 25fps@ (704x576, 640x480, 640x360)		
	Tertiary Stream	60Hz: 30fps@ (1920x1080, 1280x720, 704x576, 640x480, 640x360) 50Hz: 25fps@ (1920x1080, 1280x720, 704x576, 640x480, 640x360)		
	Video Compression	H.265 ⁺ /H.265(HEVC)/H.264 ⁺ /H.264/MJPEG		
	Video Bit Rate	16Kbps~16Mbps (CBR/VBR Adjustable)		



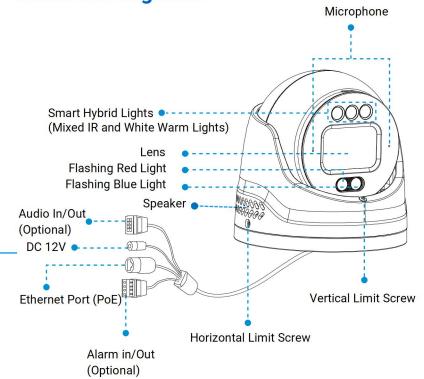
Image	AI ISP	NA	Support	
	Privacy Masking	Up to 8 Areas (Mask Area and Mosaic Area are optional)		
	ROI	Up to 8 areas		
	Image Setting	Brightness / Contrast / Saturation / Sharpness		
	Image Enhancement	BLC, HLC, 2D DNR, 3D DNR, AWB, Defog, AGC, LDC, Anti-flicker, Deblur, etc.		
	Image Rotation	Off, Rotating 180°, Flip Horizontal, Flip Vertical, Clockwise 90°, Anticlockwise 90°		
Audio	Built-in Microphone	Yes, Dual Microphone		
	Built-in Speaker	Yes, max.sound pressure level: 10cm: 95dB		
	Audio Compression	G.711/AAC/G.722/G.726		
	Audio Sampling Rate	8/16/32/44.1/48KHz		
	Audio Bit Rate	16~256kbps		
	Alarm I/O	NA	1/1	
Interface	Audio I/O	NA	1/1	
	Power Supply	PoE (802.3af) / DC 12V±25%		
	Ethernet	1 x RJ45 10M /100M Ethernet Port		
Network	Network Storage	NAS(Support NFS, SMB/CIFS), ANR		
	Protocol	IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP, NTP, SMTP, SNMP, UPnP, Bonjour, LLDP, SIP, PPPoE, VLAN, 802.1x, QoS, IGMP, ICMP, SSL,TLS 1.2		
	Video Analysis	VCA 2.0: Intrusion Detection, Region Entrance, Region Exiting, Advanced Motion Detection, Line Crossing, Loitering, Object Left, Object Removed		
Intelligent Analytics	Object Counting & Report	Count the number of objects crossing the line, optionally human and vehicle, Support regional people counting for up to 4 detection areas		
	Heat Map	The built-in statistical behavior analysis enables you to identify the busiest areas within the environment		
	Face Capture	Capture faces, get real-time snapshots and integrate with third-party systems for advanced analysis		
	One-Click Disarm	Support		
	Basic Event	Motion Detection, Tamper Detection, Audio Alarm, External Input, External Output, etc.		
Event	Exception	Network Disconnection, IP Address Filtering, Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error, No SD Card, Watermark, etc.		
	Event Action	FTP Upload, Snapshot, SMTP Upload, SD Card Record, External Output, Play Audio, SIP Phone, HTTP Notification, Warning Light, etc.		
System	Storage	Support Micro SD/SDHC/SDXC Card Local Storage, up to 1TB		
	SIP/VoIP Support	Yes, Voice & Video-over-IP		
	System Compatibility	ONVIF Profile G&	:M&S&T, One API	

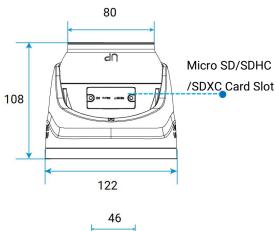


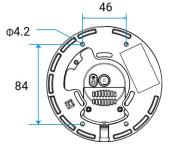
	Working Temperature	-40°C ~60°C	
	Working Humidity	0~95% RH (Non-condensing)	
	Surge Protection	4KV	
General	Power Consumption	Min.: 4W (DC 12), 5W (PoE) Max.: 10W (DC 12), 11.5W (PoE)	
	Casing Material	Metal	
	Net Weight	Approx. 0.9Kg	
	Gross Weight	Approx. 1.1Kg	
	Dimensions	Ф 122mm X 108mm	
	Warranty	3 Years/5 Years (Optional)	
	EMC	CE-EMC (EN 55032, EN 55035, EN61000), FCC (PART 15B)	
Certifications	Safety	CE-LVD (EN IEC 62368-1)	
Certifications	Environment	CE-ROHS (Directive (EU) 2015/863 amending 2011/65/EU)	
	Protection	IP67, IK10	



Structure Diagrams







Units: mm

