

DS-2CD2H86G2H-IZSY
8MP Powered by Darkfighter Motorized Varifocal Turret Network Camera

Powered by
DarkFighter



- Motorized varifocal lens for easy installation and monitoring
- Innovative socket design, highly waterproof and user-friendly
- Focus on person and vehicle classification based on deep learning
- Anti-corrosion design for stable protection (NEMA 4X)
- Water and dust resistant (IP67) and vandal resistant (IK10)
- Clear imaging against strong back light due to 120 dB WDR technology
- Efficient H.265+ compression technology

▪ Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	3840 × 2160
Min. Illumination	Color: 0.0008 Lux @ (F1.2, AGC ON), B/W: 0 Lux with IR
Shutter Time	1/3 s to 1/100,000 s
Day & Night	IR cut filter
Angle Adjustment	Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°
Lens	
Lens Type	Varifocal lens, motorized lens, 2.8 to 12 mm
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 112.3° to 41.2°, vertical FOV 58.1° to 23.1°, diagonal FOV 137.4° to 47.3°
Lens Mount	Integrated
Aperture	Max. F1.2
Depth of Field	1 m to ∞
DORI	
DORI	Wide: D: 89.2 m, O: 35.4 m, R: 17.8 m, I: 8.9 m Tele: D: 220.0 m, O: 87.3 m, R: 44.0 m, I: 22.0 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	Up to 40 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
Video	
Main Stream	50 Hz: 25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 24 fps (3840 × 2160), 30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) *Third stream is supported under certain settings.
Video Compression	Main stream: H.265/H.264/H.264+/H.265+, , Sub-stream: H.265/H.264/MJPEG, , Third stream: H.265/H.264, , *Third stream is supported under certain settings.
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile, Main Profile, High Profile
H.265 Type	Main Profile
Bit Rate Control	CBR, VBR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Region of Interest (ROI)	1 fixed region for main stream and sub-stream
Audio	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)

Audio Sampling Rate	8 kHz/16 kHz/32 kHz/48 kHz
Environment Noise Filtering	Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets, SRTP, SFTP
Simultaneous Live View	Up to 6 channels
API	ONVIF (Profile S, Profile T, Profile G), ISAPI, SDK, ISUP
User/Host	Up to 32 users 3 user levels: administrator, operator, and user
Security	Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.1/1.2/1.3, host authentication (MAC address)
Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
Client	iVMS-4200, Hik-Connect, Hik-Central
Web Browser	Plug-in required live view: IE 10, IE 11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+
Image	
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, adjustable by client software or web browser
Day/Night Switch	Day, Night, Auto, Schedule
Wide Dynamic Range (WDR)	120 dB
SNR	≥ 52 dB
Image Enhancement	BLC, HLC, 3D DNR
Privacy Mask	4 programmable polygon privacy masks
Interface	
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 512 GB
Audio	1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium, 1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium
Alarm	1 input, 1 output (max. 24 VDC/24 VAC, 1 A)
Reset Key	Yes
Event	
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), exception
Smart Event	Scene change detection
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture

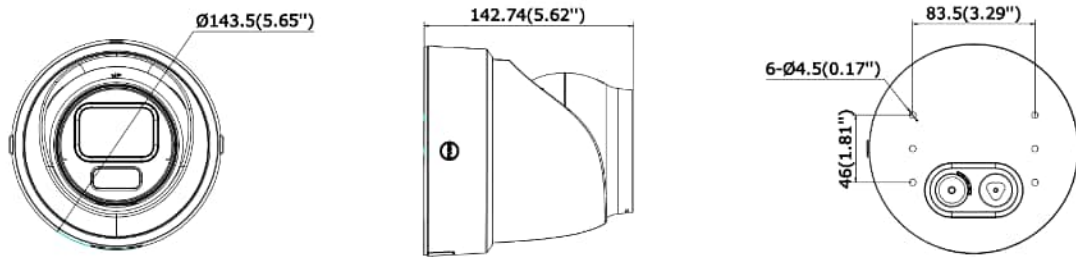
Deep Learning Function	
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
Face Capture	Yes
General	
Power	12 VDC \pm 25%, 0.9 A, max. 10.8 W, 2-core terminal block, reverse polarity protection, PoE: IEEE 802.3af, Class 3, max. 12.95 W
Material	Base: Metal, cover: Metal
Dimension	\varnothing 143.5 mm \times 142.7 mm (\varnothing 5.7" \times 5.6")
Package Dimension	170 mm \times 170 mm \times 225 mm (6.7" \times 6.7" \times 8.9")
Weight	Approx. 1230 g (2.7 lb.)
With Package Weight	Approx. 1490 g (3.3 lb.)
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Language	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Function	Heartbeat, mirror, password reset via email, pixel counter, anti-banding
Approval	
EMC	CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021
Safety	CB: IEC 62368-1:2014+A11
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006, NEMA 4X (NEMA 250-2018)
Protection	IP67: IEC 60529-2013, IK10: IEC 62262:2002

▪ Available Model

DS-2CD2H86G2H-IZSY(2.8-12mm)

DS-2CD2H86G2H-IZSY(2.8-12mm)(Black)

▪ **Dimension**



Unit: mm(inch)

▪ **Accessory**

▪ **Optional**

DS-1618ZJ-Y	DS-1273ZJ-140-Y	DS-1475ZJ-Y	DS-1476ZJ-Y	DS-1271ZJ-140-Y
				
DS-1663ZJ-Y	DS-1661ZJ-Y			
				

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