

**DS-2CD2H46G2H-IZSY**  
**4MP 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
- Excellent low illumination performance via F1.0 Powered by DarkFighter
- 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	1/3" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Min. Illumination	Color: 0.001 Lux @ (F1.0, 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 105.4° to 34.3°, vertical FOV 56.1° to 19.3°, diagonal FOV 125.8° to 39.4°
Lens Mount	Ø14
Aperture	Max. F1.0
Depth of Field	1 m to ∞
DORI	
DORI	Wide: D: 63.4 m, O: 25.2 m, R: 12.7 m, I: 6.3 m Tele: D: 108.6 m, O: 71.7 m, R: 36.1 m, I: 18.1 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 (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (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 8 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
<b>Network</b>	
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 (ProfileS, ProfileT, ProfileG), 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+
<b>Image</b>	
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
<b>Interface</b>	
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
<b>Event</b>	
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
<b>Deep Learning Function</b>	
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)

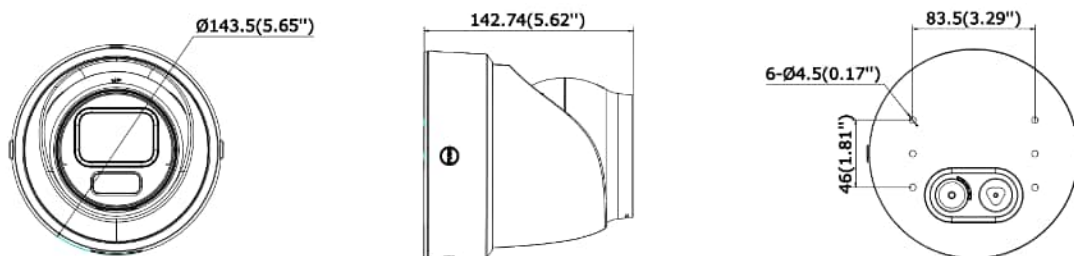
Face Capture	Yes
<b>General</b>	
Power	12 VDC $\pm$ 25%, 0.9 A, max. 10.8 W, 2-core terminal block, reverse polarity protection, PoE: IEEE 802.3af, Class 3, max. 12.95 W
Material	Base: Metal, cover: Metal
Dimension	$\varnothing$ 143.5 mm $\times$ 142.7 mm ( $\varnothing$ 5.7" $\times$ 5.6")
Package Dimension	170 mm $\times$ 170 mm $\times$ 225 mm (6.7" $\times$ 6.7" $\times$ 8.9")
Weight	Approx. 1270 g (2.8 lb.)
With Package Weight	Approx. 1540 g (3.4 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
<b>Approval</b>	
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-2CD2H46G2H-IZSY(2.8-12mm)

DS-2CD2H46G2H-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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