

# iDS-2CD7A46G0/H-IZHS(Y) 4 MP IR Varifocal Bullet Network Camera





Hikvision has been dedicated to develop products with security since established. Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection. In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security protection capability and protect your devices as well as your data from malicious cyber attacks.

- Hikvsion Embedded Open Platform 2.0 for 3rd party integration
- Supports 2 Tops computing power, 150 MB system memory, 1024 MB smart RAM, and 2 GB eMMC storage for sharing resources
- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 140 dB WDR technology
- Efficient H.265+ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Water and dust resistant (IP67) and vandal proof (IK10)



## Specification

Camera			
Image Sensor	1/1.8" Progressive Scan CMOS		
Max. Resolution	2688 × 1520		
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON), B/W: 0 Lux		
William Mariin M	with IR		
Shutter Time	1 s to 1/100,000 s		
Day & Night	IR cut filter		
Lens			
	2.8 to 12 mm, horizontal FOV 114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV		
Focal Length & FOV	141.3° to 48.1°		
rocar cengan a rov	8 to 32 mm, horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°		
Focus	Auto, Semi-auto, Manual		
Iris Type	P-iris		
Aperture	2.8 to 12 mm: F1.2, 8 to 32 mm: F1.6		
DORI			
	2.8 to 12 mm:		
BODI	D: 149.0 m, O: 59.1 m, R: 29.8 m, I: 14.9 m		
DORI	8 to 32 mm:		
	D: 400 m, O: 158.7 m, R: 80 m, I: 40 m		
Illuminator			
Supplement Light Type	IR		
Supplement Light Range	2.8 to 12 mm: Monitoring: 50 m; 8 to 32 mm: Monitoring: 100 m		
Smart Supplement Light	Yes		
IR Wavelength	850 nm		
НЕОР			
	Memory: 150 MB,		
Open Resources	Smart RAM: 1024 MB,		
	eMMC: 2 GB		
Computing Power	2 TOPS		
Open Capability	HEOP 2.0 OpendevSDK		
Deep Learning Structure	Caffe, PyTorch, TensorFlow		
Programming Language	C, C++		
Video			
Main Standard	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)		
Main Stream	60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)		
Sub Stroom	50 Hz: 25 fps (704 × 576, 640 × 480)		
Sub-Stream	60 Hz: 30 fps (704 × 480, 640 × 480)		
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)		
minu Su cam	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)		
Fourth Stream	50 Hz: 25 fps (704 × 576, 640 × 480)		
i oui tii sti eaiii	60 Hz: 30 fps (704 × 480, 640 × 480)		
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480)		
FIIUI SU Ediff	60 Hz: 30 fps (704 × 480, 640 × 480)		



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	Main stream: H.265+/H.265/H.264+/H.264,		
Video Compression	Sub-stream: H.265/H.264/MJPEG,		
	Third stream: H.265/H.264,		
	Fourth stream: H.265/H.264/MJPEG,		
\".\".\".\".\".\".\".\".\".\".\".\".\".\	Fifth stream: H.265/H.264/MJPEG		
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)	4 fixed regions for each stream		
Target Cropping	Yes		
Audio			
Audio Type	Mono sound		
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		
Addio bit Nate	(MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)		
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz		
Environment Noise Filtering	Yes		
Network			
Dratacals	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP,		
Protocols	UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, WebSocket, WebSockets		
Simultaneous Live View	Up to 20 channels		
API	Open Network Video Interface (Profile S, Profile G), ISAPI, SDK, ISUP		
User/Host	Up to 32 users		
USEI/HUST	3 user levels: administrator, operator, and user		
	Password protection, complicated password, HTTPS encryption, 802.1X authentication		
	(EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest		
Security	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, TLS 1.2, TLS 1.3		
Client	iVMS-4200, Hik-Connect		
	Plug-in required live view: IE 10, IE 11,		
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+,		
	Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+		
	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR),		
Network Storage	Together with high-end Hikvision memory card, memory card encryption and health		
	detection are supported.		
Image			
Image Parameters Switch	Yes		
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, AGC, white balance,		
	adjustable by client software or web browser		
Day/Night Switch	Day, Night, Auto, Schedule, Alarm Trigger		
Wide Dynamic Range (WDR)	140 dB		
Image Enhancement	BLC, HLC, 3D DNR, Defog		
Privacy Mask	8 programmable polygon privacy masks, mask color or mosaic configurable		



SNR	≥ 52 dB	
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.	
Interface		
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)	
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port	
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB	
Audio	1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp, input impedance: 4.7 K $\Omega$ , interface type: non-equilibrium, 1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp, output impedance: 100 $\Omega$ , interface type: non-equilibrium, mono sound	
Alarm	2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)	
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)	
Reset Key	Yes	
Power Output	12 VDC, max. 100 mA	
Event		
Basic Event	Motion detection, video tampering alarm, network disconnected, IP address conflict, illegal login, HDD full, HDD error, abnormal restart, video quality diagnosis	
Smart Event	scene change detection, audio exception detection, defocus detection	
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning	
General		
Power	12 VDC ± 20%, 1.4 A, max. 16.8 W, three-core terminal block, reverse polarity protection, PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.48 A to 0.36 A, max. 20 W	
Material	Aluminum alloy body	
Dimension	Ø140 mm × 351 mm (Ø5.5" × 13.8")	
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")	
Weight	Approx. 1955 g (2.0 lb.)	
With Package Weight	Approx. 3093 g (3.0 lb.)	
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)	
Startup and Operating Conditions	-40 °C to 60 °C (-40 °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, one-key reset, mirror, password protection, pixel counter, anti-banding	
Cable Length	0.25 m (0.8 ft.)	
Approval		
EMC	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, EN50121-4, RCM: AS/NZS CISPR 32: 2015,	



	UL: UL 62368-1,	
	CB: IEC 62368-1: 2014+A11,	
Safety	CE-LVD: EN 62368-1: 2014/A11: 2017,	
	BIS: IS 13252 (Part 1): 2010/IEC 60950-1: 2005,	
	LOA: IEC/EN 60950-1	
Environment	CE-RoHS: 2011/65/EU,	
	WEEE: 2012/19/EU,	
	Reach: Regulation (EC) No 1907/2006	
Protection	IP67: IEC 60529-2013, IK10: IEC 62262:2002	
Anti-Corrosion Protection	-Y: NEMA 4X (NEMA 250-2018)	
Other	PVC FREE	

### Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

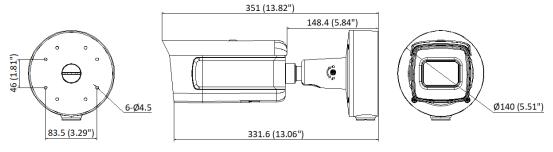
With -Y model: This model has MODERATE PROTECTION. Without -Y model: This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti- corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti- corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti- corrosion protection is needed.

#### Available Model

iDS-2CD7A46G0/H-IZHSY(2.8-12mm) iDS-2CD7A46G0/H-IZHSY(8-32mm)

#### Dimension



Unit: mm (inch)



#### Accessory

### Optional

DS-1476ZJ-SUS	DS-1475ZJ-SUS
Corner Mount	Vertical Pole Mount
	Ann

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