

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



















- 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)





#### Function

**Face Recognition** 

With embedded deep learning based algorithms, the camera is able to give the best shot of a target face through detecting, tracking, capturing, grading and selecting. The camera captures the face and outputs the features, such as gender, age, and expression. The camera uses face exposure function to dynamically adjust face area exposure of captures and ensures high face picture quality.

**Perimeter Protection** 

With embedded deep learning based target detection and classification algorithms, the camera carries out the duty of perimeter protection, monitoring the actions of line crossing, intrusion, region entrance, and region exiting. The algorithms greatly filter out the mistaken alarm caused by the interference of leafs, lights, animal, flag, etc.

Multi-Target-Type Recognition

With the embedded deep learning algorithms, the camera detects and captures the face, human body, vehicle in the specified region and outputs the features, such as gender, age, top color, and vehicle type.



# Specification

Specification					
Camera					
Image Sensor	1/1.8" Progressive Scan CMOS				
Max. Resolution	2560 × 1440				
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON); B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR				
Shutter Time	1 s to 1/100,000 s				
D 0 M 1 /	IR cut filter				
Day & Night	Blue glass module to reduce ghost phenomenon				
Lens					
	2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal				
5	FOV: 141.1° to 48°				
Focal Length & FOV	8 to 32 mm, horizontal FOV: 42.5° to 15.1°, vertical FOV: 23.3° to 8.64°, diagonal FOV:				
	49.6° to 17.3°				
Focus	Auto, semi-auto, manual				
Iris Type	P-iris				
	2.8 to 12 mm: F1.2 to F2.5				
Aperture	8 to 32 mm: F1.7 to F1.73				
DORI					
	Wide:				
	2.8 to 12 mm: D: 60 m, O: 23.8 m, R: 12 m, I: 6 m				
DODL	8 to 32 mm: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15 m				
DORI	Tele:				
	2.8 to 12 mm: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m				
	8 to 32 mm: D: 400 m, O: 158.7 m, R: 80 m, I: 40 m				
Illuminator					
Supplement Light Type	IR				
	2.8 to 12 mm: 50 m				
Supplement Light Range	8 to 32 mm: 100 m				
Smart Supplement Light	Yes				
IR Wavelength	850 nm				
Video					
	50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280× 720)				
Main Stream	60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280× 720)				
	50 Hz: 25 fps (704 × 480, 640 × 480)				
Sub-Stream	60 Hz: 30 fps (704 × 480, 640 × 480)				
	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)				
Third Stream	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)				
	50 Hz: 25 fps (704 × 480, 640 × 480)				
Fourth Stream	60 Hz: 30 fps (704 × 480, 640 × 480)				
	50 Hz: 25 fps (704 × 480, 640 × 480)				
Fifth Stream	60 Hz: 30 fps (704 × 480, 640 × 480)				
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG				
Video Bit Rate	32 Kbps to 8 Mbps				
H.264 Type	Baseline Profile/Main Profile/High Profile				
,,					



H.265 Type	Baseline Profile/Main Profile/High Profile				
Bit Rate Control	CBR/VBR				
Scalable Video Coding (SVC)	H.264 and H.265 encoding				
Region of Interest (ROI)	4 fixed regions for main stream, sub-stream, third stream, fourth stream and fifth stream				
Target Cropping	Yes				
Audio					
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64 Kbps (AAC) /8 to 320 Kbps (MP3)				
Audio Type	Mono sound				
Environment Noise Filtering	Yes				
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz				
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3				
Network					
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS				
Simultaneous Live View	Up to 20 channels				
API	Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), 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 1.2				
Network Storage	NAS (NFS, SMB/CIFS), auto network replenishment (ANR)  Together with high-end Hikvision memory card, memory card encryption and health detection are supported.				
Client	iVMS-4200, Hik-Connect				
Web Browser	Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11 Plug-in free live view: Chrome 45.0+, Firefox 52.0+ Not recommended: Safari 11+, Edge				
Image					
Image Parameters Switch	Yes				
Image Settings	Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by client software or web browser				
	Day, Night, Auto, Schedule, Alarm Trigger				
Day/Night Switch					
Day/Night Switch Wide Dynamic Range (WDR)	140 dB				
Wide Dynamic Range (WDR)	140 dB				
Wide Dynamic Range (WDR) Image Enhancement	140 dB BLC, HLC, Defog, 3D DNR				
Wide Dynamic Range (WDR) Image Enhancement SNR	140 dB  BLC, HLC, Defog, 3D DNR  ≥ 52 dB				
Wide Dynamic Range (WDR) Image Enhancement SNR Privacy Mask	140 dB  BLC, HLC, Defog, 3D DNR  ≥ 52 dB  8 programmable polygon privacy masks, mask color or mosaic configurable				
Wide Dynamic Range (WDR) Image Enhancement SNR Privacy Mask Image Stabilization	140 dB  BLC, HLC, Defog, 3D DNR  ≥ 52 dB  8 programmable polygon privacy masks, mask color or mosaic configurable  EIS				



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	With -Y: 1 input (line in), 1 output (line out), 3.5 mm connector				
Alarm	2 input, 2 outputs (max. 24 VDC, 1 A)				
RS-485	With -Y: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)				
Reset Key	Yes				
Power Output	With -Y: 12 VDC, max. 100 mA				
Event					
	Motion detection, video tampering alarm, exception (network disconnected, IP				
Basic Event	address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality				
	diagnosis, vibration detection				
	Line crossing detection, intrusion detection, region entrance detection, region exiting				
Smart Event	detection, audio exception detection, scene change detection, defocus detection				
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm				
Linkage	output, trigger recording, trigger capture				
Deep Learning Function					
	Supports simultaneous detection and capture of human body, face and vehicle				
Multi-target-type Detection	Gets 7 face features, 13 human body features and 2 vehicle features				
	1. Detects up to 60 faces simultaneously				
Face Capture	2. Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°				
	3. Uploads face with background and closed-up face pictures				
Face Comparison	Up to 10 face libraries. Up to 150,000 faces for each library. 150,000 faces in total.				
race Companson	Supports face library encryption				
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting				
Termeter Protection	Support alarm triggering by specified target types (human and vehicle)				
General					
Power	12 VDC ± 20%, 1.19 A, max. 14.28 W, three-core terminal block				
	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.396 A to 0. 295A, max. 16.8 W				
Material	Aluminum alloy body				
Dimension	Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7")				
	With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")				
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")				
Weight	Approx. 1950 g (4.2 lb.)				
With Package Weight	Approx. 3070 g (6.7 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)				
Containons	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,				
	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,				
Language	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,				
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian				
	Heartbeat, mirror, password protection, watermark, privacy mask, IP address filter,				
General Function	one-key reset, five streams				
	one key reset; five streams				



Approval				
EMC	FCC (47 CFR Part 15, Subpart B);			
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN			
	50130-4: 2011+A1: 2014);			
	RCM (AS/NZS CISPR 32: 2015);			
	IC (ICES-003: Issue 7);			
	KC (KN 32: 2015, KN 35: 2015)			
Safety	UL (UL 62368-1);			
	CB (IEC 62368-1:2014+A11);			
	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	IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)			
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)			
Automotive and Railway	EN50121-4			
Other	PVC FREE			

#### Available Model

iDS-2CD7A46G0-IZHSY (2.8 to 12 mm, 8 to 32 mm) iDS-2CD7A46G0-IZHS (2.8 to 12 mm, 8 to 32 mm)

## 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.

-Y model: This model has MODERATE PROTECTION.

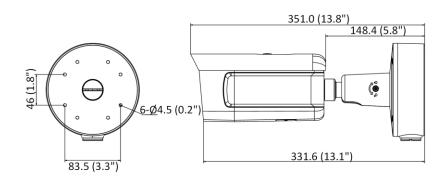
Without -Y model: This model has NO SPECIFIC PROTECTION.

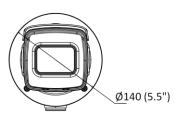
Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion
	protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and
	more.
Moderate protection	Hikvision products at this level are 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.



#### Dimension

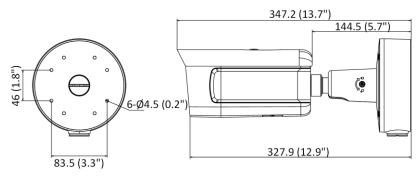
With -Y model:

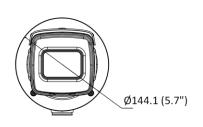




Unit: mm (inch)

Without -Y model:





Unit: mm (inch)

## Accessory

## Optional

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



Distributed by

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