

# iDS-2CD7146G0-IZS 4 MP IR Varifocal Dome 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
- 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				
Day O Nijaka	IR cut filter				
Day & Night	Blue glass module to reduce ghost phenomenon				
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°				
Lens					
	2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal				
5 11 11 0 501	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 2.5				
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				
	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				
6 1	2.8 to 12 mm: 30 m				
Supplement Light Range	8 to 32 mm: 50 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	· · · · · · · · · · · · · · · · · · ·				
Video Bit Rate	32 Kbps to 8 Mbps				
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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				
	4 fixed regions for main stream, sub-stream, third stream, fourth stream and fifth				
Region of Interest (ROI)	stream				
Target Cropping	Yes				
Audio					
Audio Type	Mono sound				
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3				
	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64				
Audio Bit Rate	Kbps (AAC) /8 to 320 Kbps (MP3)				
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz				
Environment Noise Filtering	Yes				
Network					
	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,				
Protocols	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				
7.1.7	Up to 32 users				
User/Host	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 1.2				
	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.				
Client	iVMS-4200, Hik-Connect				
	Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11				
Web Browser	Plug-in free live view: Chrome 45.0+, Firefox 52.0+				
	Not recommended: Safari 11+, Edge				
Image					
Image Parameters Switch	Yes				
	Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by				
Image Settings	client software or web browser				
Day/Night Switch	Day, Night, Auto, Schedule, Alarm Trigger				
Wide Dynamic Range (WDR)	140 dB				
SNR	≥ 52 dB				
Image Enhancement	BLC, HLC, Defog, 3D DNR				
Privacy Mask	8 programmable polygon privacy masks, mask color or mosaic configurable				
Image Stabilization	EIS				
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format				
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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 G					
Audio	1 input (line in), 1 output (line out), 3.5 mm connector,1 built-in microphone					
Alarm	1 input, 1 output (max. 24 VDC, 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, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis					
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection, audio exception detection, scene change detection, defocus detection					
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture					
Deep Learning Function						
Multi-target-type Detection	Supports simultaneous detection and capture of human body, face and vehicle; Gets 7 face features, 13 human body features and 2 vehicle features					
Face Capture	<ol> <li>Detects up to 60 faces simultaneously</li> <li>Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°</li> <li>Uploads face with background and closed-up face pictures</li> </ol>					
Face Comparison	Up to 10 face libraries. Up to 150,000 faces for each library. 150,000 faces in total. Supports face library encryption					
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)					
General						
Power	12 VDC± 20%, 1.02 A, max. 12.4 W, two-core terminal block 24 VAC± 20%, 0.49 A, max. 11.8 W, two-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.22 A to 0.29 A, max. 12.5 W					
Material	Aluminum alloy body					
Dimension	Ø140.5 × 122.6 mm (Ø5.5" × 4.8")					
Package Dimension	244 × 174 × 173 mm (9.6" × 6.9" × 6.8")					
Weight	Approx. 875 g (1.93 lb.)					
With Package Weight	Approx. 1415 g (3.11 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 protection, watermark, privacy mask, IP address for 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)			
CE-RoHS (2011/65/EU); Environment WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)				
Protection	IK10 (IEC 62262:2002)			
Other	PVC FREE			

## Available Model

iDS-2CD7146G0-IZS (2.8 to 12 mm, 8 to 32 mm)

## Typical Application

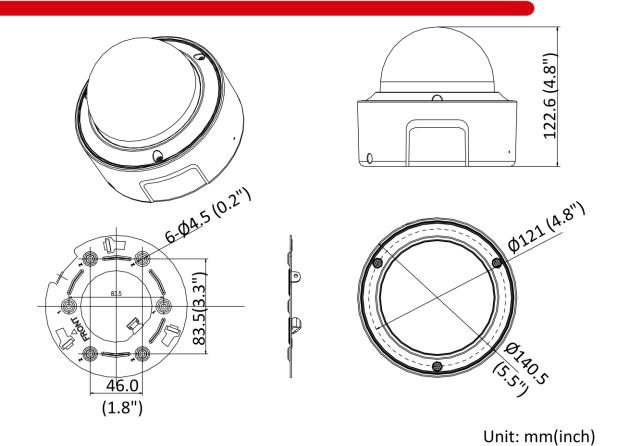
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

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







## Optional

DS-12 K1T804 Series Fir	227ZJ I Value ngerprint	DS-1281ZJ-DM23 Inclined Ceiling Mount	DS-1276ZJ-SUS Corner Mount	DS-1273ZJ-130B Wall Mount	DS-1273ZJ-130 Wall Mount
				6	
DS-1275 Vertica Mo	al Pole	DS-1271ZJ-130 Pendant Mount			
		1			



Distributed by

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