

# 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
- Advanced streaming technology that enables smooth live view and data self-correcting in poor network
- 5 streams and up to 5 custom streams to meet a wide variety of applications
- Vandal proof (IK10)





#### Function

#### **Face Counting**

With the embedded deep learning algorithms, the camera integrates multiple intelligences. It counts persons and samples the face features simultaneously, and compares them with the built-in face library, so to remove the duplicated person. It counts persons and reports a face alarm simultaneously to achieve both the entrance control and people counting.

#### **Hard Hat Detection**

With the embedded deep learning algorithms, the camera detects the persons in the specified region. It detects whether the person is wearing a hard hat, and captures the head of the person and reports an alarm if not.

#### **Multi-Target-Type Detection**

With the embedded deep learning algorithms, the camera detects and captures the face and human body in the specified region and outputs the features, such as gender, age and top color. It supports a structurized modeling of the face and human body to achieve a structurized data collection.

#### **Queue Management**

With embedded deep learning based algorithms, the camera detects queuing-up people number and waiting time of each person. The body feature detection algorithm helps filter out wrong targets and increase the accuracy of detection.

#### Metadata

Metadata uses individual instances of application data or the data content. Metadata can be used for third-party application development.

#### **Smooth Streaming**

Smooth streaming offers solutions to improve the video quality in different network conditions. For example, in poor network conditions, adapting to the detected real-time network condition, streaming bit rate and resolution are automatically adjusted to avoid mosaic and lower latency in live view; in multiplayer network conditions, the camera transmits the redundant data for the self-error correcting in back-end device, so that to solve the mosaic problem because of the packet loss and error rate.



# Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON); B/W: 0.0003 Lux @ (F1.2, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
P/N	P/N
Wide Dynamic Range	140 dB
Day & Night	IR cut filter
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°
Power-off Memory	Yes
Lens	
Focus	Auto, semi-auto, manual
Lens Type & FOV	2.8 to 12 mm, horizontal FOV 114.5° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 141.1° to 48°
	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°
Aperture	2.8 to 12 mm: F1.2 to 2.5 8 to 32 mm: F1.7 to F1.73
Lens Mount	Integrated
Blue Glass Module	Blue glass module to reduce ghost phenomenon.
P-Iris	Yes
Illuminator	
IR Range	2.8 to 12 mm: 30 m 8 to 32 mm: 50 m
Wavelength	850 nm
Smart Supplement Light	Yes
Video	
Max. Resolution	2680 × 1520
Main Stream	50Hz: 25fps (2680 × 1520,2560 × 1440,1920 × 1080,1280 × 720) 60Hz: 30fps (2680 × 1520,2560 × 1440,1920 × 1080,1280 × 720)
Sub Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fourth Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fifth Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)
Custom Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Video Compression	Main stream: H.265+/H.265/H.264+/ H.264 Sub-stream/Third stream/Fourth stream/Fifth stream/custom stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	Baseline Profile/Main Profile/High Profile
H.265 Type	Main Profile
H.264+	Main Stream supports
H.265+	Main Stream supports
Bit Rate Control	CBR/VBR



Stream Type	Main stream/Sub-stream/third stream/fourth stream/fifth stream/custom stream
Scalable Video Coding (SVC)	H.265 and H.264 support
Region of Interest (ROI)	4 fixed regions for each stream
Audio	
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/MP3
·	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PCM)/8-
Audio Bit Rate	320Kbps(MP3)
Audio Type	Mono sound
Network	
Simultaneous Live View	Up to 20 channels
API	ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP
	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
Smooth Streaming	Yes
User/Host	Up to 32 users. 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 ONVIF, RTP/RTSP
	OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
	microSD/SDHC/SDXC card (256 GB) local storage, and 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, Hik-Central
	Plug-in required live view: IE8+
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+
	Local service: Chrome 41.0+, Firefox 30.0+
Image	
	The IR LEDs on camera should support Smart IR function to automatically adjust power
Smart IR	to avoid image overexposure.
Day/Night Switch	Day, Night, Auto, Schedule, Triggered by Alarm In
Target Cropping	Yes
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, Distortion Correction
Image Parameters Switch	Yes
	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance
Image Settings	adjustable by client software or web browser
SNR	≥52 dB
Interface	
Alarm	1 input, 1 output (max. 24 VDC, 1 A)
, north	1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance:
	4.7 KΩ, interface type: non-equilibrium; 1 output (line out), 3.5 mm connector, max.
Audio	output amplitude: 3.3 vpp, output impedance: $100 \Omega$ , interface type: non-equilibrium,
	mono sound,1 built-in microphone
RS-485	1 RS-485(half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Video Output	1 Vp-p Composite Output(75Ω/CVBS)(Only for Debug)
·	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
On-board Storage	
Hardware Reset	Yes



Communication Interface	1 RJ45 10M/100M/1000M self-adaptive Ethernet port
Power Output	12 VDC, max. 200 mA (supported by all power supply types)
Smart Feature-Set	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Smart Event	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions configurable
	Region entrance detection, up to 4 regions configurable
	Region exiting detection, up to 4 regions configurable
	Unattended baggage detection, up to 4 regions configurable
	Object removal detection, up to 4 regions configurable
	Scene change detection, audio exception detection
Counting	Yes
Intelligent (Deep Learning Algo	prithm)
	Detects up to 30 faces simultaneously;
	Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°;
Face Recognition	Up to 3 face libraries with up to 30000 faces each are configurable;
race necognition	Recognizes face identity via face modeling, grading and comparing to those in face
	library;
	Supports face library encryption.
Multi-target-type Detection	Supports simultaneous detection of human body and face
	Gets 8 face features and 14 human body features
	Supports entering/exiting counting (track 30 targets simultaneously);
	Supports facial recognition; Supports 24-hour dynamic deduplication and face library deduplication (up to 3 face
Face Counting	libraries with up to 30000 faces);
	Supports reporting alarms when detecting the face is the same as that in the face
	library.
Hand Hat Datastian	Detects up to 30 human targets simultaneously
Hard Hat Detection	Supports up to 4 shield regions
	Detects queuing-up people number, and waiting time of each person
Queue Management	Generates reports to compare the efficiency of different queuing-ups and display the
Queue management	changing status of one queue
	Supports raw data export for further analysis
	Line crossing, intrusion, region entrance, region exiting
Premier Protection	Support alarm triggering by specified target types (human and vehicle)
	Filtering out mistaken alarm caused by target types such as leaf, light, animal, and flag etc.
General	etc.
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm
	output, trigger recording, trigger capture
Linkage Method	Trigger recording: memory card, network storage, pre-record and post-record
	Trigger captured pictures uploading: FTP, SFTP, HTTP, NAS, Email
	Trigger notification: HTTP, ISAPI, alarm output, Email
Online Upgrade	Yes
Dual Backup	Yes
Firmware Version	V5.5.120



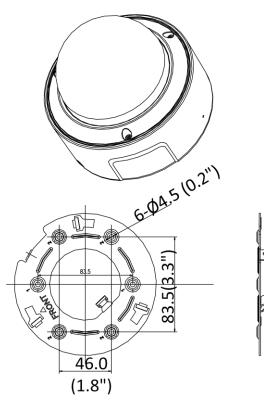
	33 languages
Web Client Language	English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak,
	French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian,
	Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai,
	Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
	Anti- flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, privacy masks,
General Function	flash log, password reset via e-mail, pixel counter
Software Reset	Yes
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	20 °C +- C0 °C / 22 °F +- 140 °F)
	-30 °C to 60 °C (-22 °F to 140 °F)
Power Supply	12 VDC ± 20%, two-core terminal block, reverse polarity protection;
	24 VAC ± 20%;
	PoE: 802.3af, Type 1 Class 3
Power Consumption and	12 VDC, 0.83 A, max. 9.96 W
·	24 VAC, 0.85 A, max. 12 W
Current	PoE(802.3af, 36 V to 57 V), 0.35 A to 0.21 A, max. 12 W
Power Interface	Two-core terminal block
Screw Material	Mild steel
Camera Dimension	Ø140.5 × 122.6 mm (Ø5.5" × 4.8")
Package Dimension	244 × 174 × 173 mm (9.6" × 6.9" × 6.8")
Camera Weight	Approx. 950 g (2.1 lb.)
With Package Weight	Approx. 1300 g (2.9 lb.)
Metadata	
	Metadata of intrusion detection, line crossing detection, region entrance detection,
Metadata	region exiting detection, unattended baggage detection, object removal, face capture
	and queue management are supported.
Approval	
Class	Class B
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN
	61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC
	(ICES-003: Issue 6, 2016); KC (KN 32: 2015, KN 35: 2015)
	UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN
Safety	60950-1:2005 + Am 1:2009 + Am 2:2013); BIS (IS 13252(Part
	1):2010+A1:2013+A2:2015); LOA (IEC/EN 60950-1)
Environment	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	Ingress protection: IK10(IEC 62262:2002)

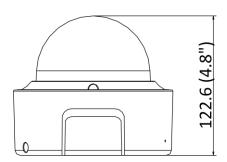
### Available Model

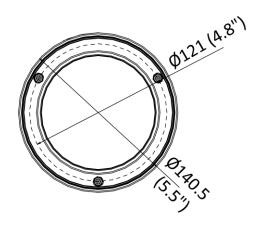
iDS-2CD7146G0-IZS(8 to 32mm), iDS-2CD7146G0-IZS(2.8 to 12mm)



## Dimension







Unit: mm(inch)

### **Accessory**



DS-1273ZJ-130 Wall Mount



DS-1227ZJ **In-ceiling Mount** 



DS-1273ZJ-130B **Wall Mount** 



DS-1276ZJ-SUS **Corner Mount** 



DS-1271ZJ-130 **Pendant Mount** 





DS-1275ZJ-SUS **Vertical Pole Mount** 



DS-1281ZJ-DM23 **Inclined Ceiling Mount** 



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**HIKVISION**°

#### Headquarters

No.555 Qianmo Road, Binjiang District, Hangzhou 310051, China T +86-571-8807-5998 overseasbusiness@hikvision.com

Hikvision USA T+1-909-895-0400 sales.usa@hikvision.com

Hikvision Australia T+61-2-8599-4233 salesau@hikvision.com

Hikvision India T+91-22-28469900 sales@pramahikvision.com

Hikvision Canada T+1-866-200-6690 sales.canada@hikvision.com

Hikvision Thailand T+662-275-9949 sales.thailand@hikvision.com Hikvision Europe T +31-23-5542770 sales.eu@hikvision.com

Hikvision Italy T+39-0438-6902 info.it@hikvision.com

Hikvision Brazil T +55 11 3318-0050 Latam.support@hikvision.com

Hikvision Turkey T +90 (216)521 7070- 7074 sales.tr@hikvision.com

Hikvision Malaysia T+601-7652-2413 sales.my@hikvision.com Hikvision UK & Ireland T +01628-902140 sales.uk@hikvision.com

Hikvision South Africa Tel: +27 [10] 0351172 sale.africa@hikvision.com

Hikvision France T +33[0]1-85-330-450 info.fr@hikvision.com

Hikvision Kazakhstan T+7-727-9730667 nikia.panfilov@hikvision.ru

Hikvision Vietnam T +84-974270888 sales.vt@hikvision.com Hikvision UAE T +971-4-4432090 salesme@hikvision.com

Hikvision Singapore T +65-6684-4718 sg@hikvision.com

Hikvision Spain T +34-91-737-16-55 info.es@hikvision.com

Hikvision Tashkent T +99-87-1238-9438 uzb@hikvision.ru

Hikvision Hong Kong T +852-2151-1761 info.hk@hikvision.com Hikvision Russia T +7-495-669-67-99 saleru@hikvision.com

Hikvision Korea T +82-{0}31-731-8817 sales.korea@hikvision.com

Hikvision Poland T +48-22-460-01-50 info.pl@hikvision.com

Hikvision Indonesia T +62-21-2933759 Sales.Indonesia@hikvision.com

Hikvision Colombia sales.colombia@hikvision.com