

HIKVISION

# DS-2CD7146G0-IZS 4 MP IR Varifocal Dome Network Camera





# **DeepinView**

- 1/1.8" Progressive Scan CMOS
- 2560 × 1440 @ 30fps
- MJPEG up to 1920 × 1080 @ 30fps
- 2.8 to 12 mm/8 to 32 mm motorized lens
- Color: 0.002 Lux @ (F1.2, AGC ON), 0.005 Lux @ (F1.8, AGC ON), 0 Lux with IR
- H.265, H.265+, H.264, H.264+
- 140dB WDR
- IR range: up to 30 m
- Alarm 1 input/1 output, audio 1 input/1 output, RS-485

- IK10
- 5 streams and up to 5 custom streams
- 6 behavior analyses, 3 exception detection, and face detection
- Built-in microSD/SDHC/SDXC card slot, up to 256 GB
- Metadata of intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, and object removal are supported.





# Function

#### **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.

#### Metadata

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

#### **Face Capture**

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 procedure reduces the happening of mistaken capture, and thus gets the best face shot, improving the accuracy rate of face comparison by the back-end devices. The camera uses face exposure function to dynamically adjusts face area exposure of captures and ensure 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 reduce the mistaken alarm caused by the interference of leafs, lights and etc.

#### **Power Protection**

The camera supports a wide voltage range of 10 VDC to 48 VDC. If the voltage instability occurs, the camera still works properly. The camera supports reverse polarity protection which can avoid the camera malfunction caused by false operation.



# Specifications

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @ (F1.2, AGC ON), 0.005 Lux @ (F1.8, AGC ON), 0 Lux with IR
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
Day & Night	IR Cut Filter.
WDR	140 dB
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°
Lens	
Lens Type	Motorized lens, 2.8 to 12 mm and 8 to 32 mm optional
Aporturo	2.8 to 12 mm: F1.2 to 2.5
Aperture	8 to 32 mm: F1.8, Constant F1.8 throughout the zoom range
Focus	Auto, semi-auto, manual
	2.8 to 12 mm, horizontal FOV 109.2° to 38.9°, vertical FOV 56.2° to 21.9°, diagonal
FOV	FOV 134.5° to 45°
	8 to 32 mm, horizontal FOV 37.7° to 15.2°, vertical FOV 21° to 8.6°, diagonal FOV
	43.3° to 17.24°
Lens Mount	Integrated
Illuminator	
IR Range	Up to 30 m
Wavelength	850 nm
Video	
Max. Resolution	2560 × 1440
Video Stream	5 defined streams and up to 5 custom stream
Main Stream	50Hz: 25fps (2560 × 1440, 1920 × 1080, 1280 × 720)
Main Stream	60Hz: 30fps (2560 × 1440, 1920 × 1080, 1280 × 720)
Sub Stream	50Hz: 25fps (704 × 576, 640 × 480)
Sub Stream	60Hz: 30fps (704 × 480, 640 × 480)
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)
inite stream	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:
U 264 T	H.265/H.264/MJPEG
Н.264 Туре	Baseline Profile/Main Profile/High Profile



H.264+	Main stream support
Н.265 Туре	Main Profile
H.265+	Main stream support
Video Bit Rate	32 Kbps to 16 Mbps
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Audio	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM
Audio Bit Rate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PC M)
Environment Noise Filtering	Yes
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Audio Sampling Kate	0 KH2/ 10 KH2/ 32 KH2/ 44.1 KH2/ 40 KH2
Smart Feature-Set	
	Line crossing detection, up to 4 lines configurable
	Intrusion detection, up to 4 regions configurable
	Region entrance detection, up to 4 regions configurable
Smart Event	Region exiting detection, up to 4 regions configurable
Sinart Event	Unattended baggage detection, up to 4 regions configurable
	Object removal detection, up to 4 regions configurable
	Face detection: detects faces and upload images
	Scene change detection, audio exception detection, defocus detection
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Face Capture	Face detection performance: detects up to 30 faces at the same time Detectable face position: supports swing left and right from -65° to 65°, tilt up and down from -45° to 45°
	Line crossing, intrusion, region entrance, and region exiting
	Support alarm triggering by specified target types (human and vehicle)
Perimeter Protection	Filtering out false alarm caused by target types such as leaf, light, animal, and flag, etc.
Statistics	Counting
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture
	Main stream/sub stream/third stream/fourth stream/fifth stream: 4 fixed regions
Region of Interest	and dynamic face tracking for each stream
Image	
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, distortion correction
Image Setting	Rotate mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable by client software or web browser
Target Cropping	Yes
Day/Night Switch	Day/Night/Auto/Schedule/Triggered by Alarm In
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Network	
Network Storage	microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS,SMB/CIFS), ANR

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	Together with high-end Hikvision memory card, memory card encryption and
	health detection are supported. 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, SSL/TLS
API	ONVIF (PROFILE S, PROFILE G), ISAPI, SDK
Smooth Streaming	Yes
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
	ONVIF, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2
Simultaneous Live View	Up to 20 channels
User/Host	Up to 32 users. 3 user levels: administrator, operator and user
Client	iVMS-4200, Hik-Connect, Hik-Central
Web Browser	Plug-in required live view: IE8+, Chrome 41.0-44, Mozilla Firefox30.0-51, Safari8.0-11 Plug-in free live view: Chrome 45+, Mozilla Firefox52+
Interface	
Audio	1 input (line in, 3.5 mm), 1 output (line out, 3.5 mm), mono sound
Audio	1 RJ45 10M/100M/1000M Ethernet port
Communication Interface	1 RS-485 interface (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Alorm	1 input, 1 output (max. 24 VDC/VAC, 1A)
Alarm	
Video Out	1Vp-p composite output (75 Ω/CVBS), only for adjustment
Power Output	12 VDC, max. 200 mA
Interface Style	Socket style interface
On-board Storage	Built-in microSD/SDHC/SDXC slot, up to 256 GB
General	
Firmware Version	5.5.90
Web Client Language	32 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)
General Function	Anti-flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter
Reset	Reset via reset button on camera body, web browser and client software
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)
Power Supply	12 VDC is recommended, 10 to 48 VDC; reverse polarity protection; two-core terminal block; PoE (802.3af, class 3)
Power Consumption and Current	With extra load: 12 VDC, 0.8 A, max. 10.5 W; PoE (802.3af, 36 V to 57 V), 0.2 A to 0.3 A, class 3 Without extra load: 12 VDC, 0.6 A, max. 8.0 W; PoE (802.3af, 36 V to 57 V), 0.2 A to 0.3 A, class 3



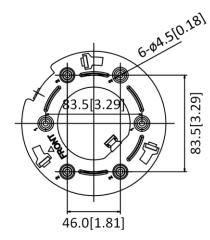
	"with extra load" means that an extra device is connected to and powered by the camera.
Material	Metal
Dimensions	Camera: Φ140.5 × 122.6 mm (Φ5.5" × 4.8") With package: 244 × 174 × 173 mm (9.6" × 6.9" × 6.8")
Weight	Camera: approx. 950 g (2.09 lb.) With Package: approx. 1300 g (2.87 lb.)
Approval	
EMC	47 CFR Part 15, Subpart B; EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014; AS/NZS CISPR 32: 2015; ICES-003: Issue 6, 2016; KN 32: 2015, KN 35: 2015
Safety	UL 60950-1, IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IS 13252(Part 1):2010+A1:2013+A2:2015
Chemistry	2011/65/EU, 2012/19/EU, Regulation (EC) No 1907/2006
Protection	Ingress protection: IK10 (IEC 62262:2002)

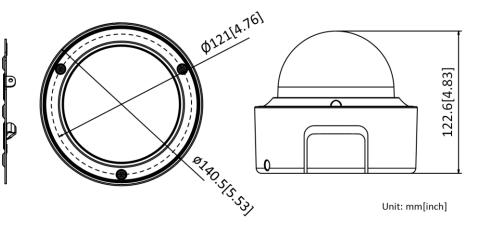
\* Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

# Available Model

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

## Dimension





### Accessory



DS-1273ZJ-130 Wall Mount



DS-1273ZJ-130B Wall Mount





DS-1271ZJ-130 Pendant Mount

DS-1279ZJ Pole





DS-1227ZJ In-ceiling Mount



DS-1276ZJ-SUS Corner Mount



DS-1281ZJ-DM23 Inclined Ceiling Mount



DS-1275ZJ-SUS Vertical Pole Mount



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