

HIKVISION

# iDS-2CD7A86G0-IZHS(Y)(R) 8 MP IR Varifocal Bullet Network Camera





# **DeepinView**

- High quality imaging with 8 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 120 dB true 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
- Water and dust resistant (IP67) and 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.

#### **Anti-Corrosion Coating**

The camera adopts high weatherproof and wearproof molding powder that confirms to AAMA2604-02 and Qualicoat (Class2) specifications, and uses two-layer special spraying technology, so its surface has excellent long-term anti-corrosion performance and physical protection function. Besides, all the exposed screws use SUS316L material and features high anti-corrosion performance. Therefore, the whole camera meets anti-corrosion requirements NEMA4X.



# Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.009 Lux @ (F1.2, AGC ON); B/W: 0.0009 Lux @ (F1.2, AGC ON)
Shutter Speed	1 s to 1/100,000 s
Slow Shutter	Yes
P/N	P/N
Wide Dynamic Range	120 dB
Day & Night	IR cut filter
Power-off Memory	Yes
Lens	
Focus	Auto, semi-auto, manual
Lens Type & FOV	<ul> <li>2.8 to 12 mm, horizontal FOV: 112.3° to 41.2°, vertical FOV: 58° to 23.1°, diagonal FOV: 137.3° to 47.3°</li> <li>8 to 32 mm, horizontal FOV: 41.8° to 14.9°, vertical FOV: 22.92° to 8.48°, diagonal FOV: 48.7° to 17°</li> </ul>
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	
	2.8 to 12 mm: 30 m
IR Range	8 to 32 mm: 80 m
Wavelength	850 nm
Smart Supplement Light	Yes
Video	
Max. Resolution	3840 × 2160
	50Hz: 25 fps (3840 × 2160, 3200 × 1800, 2560 × 1440, 1920 × 1080, 1280 × 720)
Main Stream	60Hz: 30 fps (3840 × 2160, 3200 × 1800, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub Stream	50Hz: 25 fps (704 × 576, 640 × 480) 60Hz: 30 fps (704 × 480, 640 × 480)
Third Stream	50Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)       60Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fourth Stream	50Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30 fps (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: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30 fps (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
Н.264 Туре	Baseline Profile/Main Profile/High Profile
Н.265 Туре	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
0301/11031	
	Password protection, complicated password, HTTPS encryption, 802.1X authentication
Security	(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
	microSD/SDHC/SDXC card (256 GB) local storage, and NAS (NFS, SMB/CIFS), auto
Network Storage	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
Web Browser	Plug-in required live view: IE8+
	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+
	Local service: Chrome 41.0+, Firefox 30.0+
Image	
Smart IR	The IR LEDs on camera should support Smart IR function to automatically adjust powe
Smart IK	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	≥52dB
Interface	
Alarm	2 input, 2 outputs (max. 24 VDC, 1 A)
Alaliii	-IZHSY:
	יובחסי: 1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance:
Audia	
Audio	4.7 K $\Omega$ , interface type: non-equilibrium; 1 output (line out), 3.5 mm connector, max.
	output amplitude: 3.3 vpp, output impedance: $100 \Omega$ , interface type: non-equilibrium,
DC 405	mono sound
RS-485	With -Y: 1 RS-485(half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Video Output	1 Vp-p Composite Output(75 $\Omega$ /CVBS)(For debugging only)
On-board Storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
Hardware Reset	Yes



Communication Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port
Power Output	With -Y: 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)
Face Recognition	Detects up to 30 faces simultaneously; Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°; Up to 3 face libraries with up to 30000 faces each are configurable; 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 13 human body features
Face Counting	Supports entering/exiting counting (track 30 targets simultaneously); Supports facial recognition; Supports 24-hour dynamic deduplication and face library deduplication (up to 3 face libraries with up to 30000 faces); Supports reporting alarms when detecting the face is the same as that in the face library.
Hard Hat Detection	Detects up to 30 human targets simultaneously Supports up to 4 shield regions
Queue Management	Detects queuing-up people number, and waiting time of each person Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue Supports raw data export for further analysis
Premier Protection	Line crossing, intrusion, region entrance, region exiting 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	
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture 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	V5.5.121



English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,	
	Czech, Slovak,
Web Client LanguageFrench, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,	Norwegian,
Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese	e, Thai,
Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainiar	า
General Function Anti- flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, pr	rivacy masks,
flash log, password reset via e-mail, pixel counter	
Software Reset Yes	
Storage Conditions -40 °C to 60 °C (-40 °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)	
Power Supply 12 VDC ± 20%, three-core terminal block, reverse polarity protection; Po	E: 802.3at,
Type 2 Class 4	
Power Consumption and 12 VDC, 1.33 A, max. 16.0 W	
Current PoE: (802.3at, 42.5V-57V), 0.43 A to 0.31 A, max. 18.0 W	
Power Interface 3-core terminal block	
Screw Material Mild steel	
Camera 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")	
Camera Weight 1920 g (4.2 lb.)	
With Package Weight3060 g (6.7 lb.)	
Metadata	
Metadata of intrusion detection, line crossing detection, region entrance	e detection,
Metadata region exiting detection, unattended baggage detection, object removal,	, face capture
and queue management are supported.	
Approval	
Class B	
FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2	: 2014, EN
EMC 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2	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-LV	/D (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 1	1907/2006)
Protection Ingress protection: IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)	
Automotive and Railway With -R: EN50121-4	
Anti-Corrosion Protection With -Y: NEMA 4X(NEMA 250-2014)	
Other With -Y: PVC FREE	

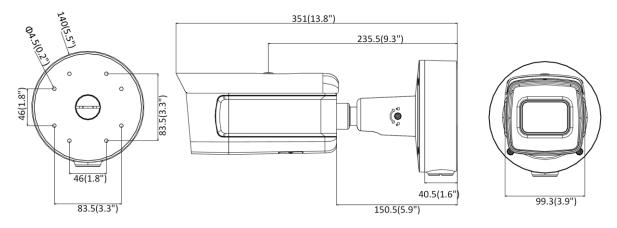
# **Available Model**

iDS-2CD7A86G0-IZHS (2.8 to 12 mm), iDS-2CD7A86G0-IZHS (8 to 32 mm), iDS-2CD7A86G0-IZHSY (2.8 to 12 mm), iDS-2CD7A86G0-IZHSY (8 to 32 mm), iDS-2CD7A86G0-IZHSYR (2.8 to 12 mm) iDS-2CD7A86G0-IZHSYR (8 to 32 mm)

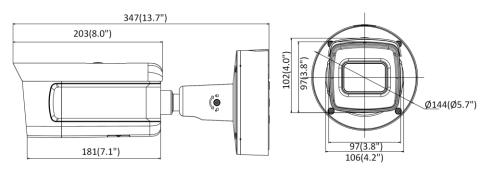


# Dimension

-Y model:



Without -Y model:



Unit: mm(inch)

### Accessory

-Y model:



DS-1476ZJ-Y Corner Mount

Without –Y model:



DS-1475ZJ-SUS Vertical Pole Mount



DS-1475ZJ-Y Vertical Pole Mount



DS-1476ZJ-SUS Corner Mount



Distributed by

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