

# iDS-2CD7A46G0/S-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

Image Sensor			
	1/1.8" Progressive Scan CMOS		
	2560 × 1440		
	Color: 0.0005 Lux @ (F1.2, AGC ON);		
Min. Illumination	B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR		
Shutter Time	1 s to 1/100,000 s		
	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		
Facel Law eth 9 FOV	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		
Aperture	2.8 to 12 mm: F1.2 to F2.5		
Aperture	8 to 32 mm: F1.7 to F1.73		
Illuminator			
Supplement Light Type	IR		
Supplement Light Range	2.8 to 12 mm: 50 m		
Supplement Light Nange	8 to 32 mm: 100 m		
Smart Supplement Light	Yes		
IR Wavelength	850 nm		
Video			
Main Stream	50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280× 720)		
Wall Stream	60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280× 720)		
Sub-Stream	50 Hz: 25 fps (704 × 480, 640 × 480)		
Sub Stream	60 Hz: 30 fps (704 × 480, 640 × 480)		
Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)		
	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)		
Fourth Stream	50 Hz: 25 fps (704 × 480, 640 × 480)		
	60 Hz: 30 fps (704 × 480, 640 × 480)		
Fifth Stream	50 Hz: 25 fps (704 × 480, 640 × 480)		
	60 Hz: 30 fps (704 × 480, 640 × 480)		
Video Compression	H.265+/H.265/H.264+/H.264/MJPEG		
H.265 Type	Baseline Profile/Main Profile/High Profile		
Video Bit Rate	32 Kbps to 8 Mbps		
H.264 Type	Baseline Profile/Main Profile/High Profile		
	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 Type	Mono sound		
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3		
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 Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz		
Environment Noise Filtering	Yes		
Network	165		
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		
User/Host	Up to 32 users		
USEI/HUSL	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		
Image Settings	Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by		
	client software or web browser		
Day/Night Switch	Day, Night, Auto, Schedule, Alarm Trigger		
Wide Dynamic Range (WDR)	140 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		
Interface			
Video Output	1 Vp-p Composite Output (75 $\Omega$ /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 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
Linkage Smart Event	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm
	output, trigger recording, trigger capture
	Line crossing detection, intrusion detection, region entrance detection, region exiting
	detection, audio exception detection, scene change detection, defocus detection
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
	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°
race captare	3. Uploads face with background and closed-up face pictures
	Up to 10 face libraries. 150,000 faces for each library. 150,000 faces in total.
Face Comparison	Supports face library encryption
	Line crossing, intrusion, region entrance, region exiting
Perimeter Protection	Support alarm triggering by specified target types (human and vehicle)
General	Support darm triggering by specimen target types (namen and territory)
Concrui	12 VDC ± 20%, 1.19 A, max. 14.28 W, three-core terminal block,
Power	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.396 A to 0. 295 A, max. 16.8 W
Material	Aluminum alloy body
Weight	Approx. 1950 g (4.2 lb.)
With Package Weight	Approx. 3070 g (6.7 lb.)
With Fackage Weight	Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7")
Dimension	With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")
Startup and Operating	403 × 150 × 100 mm (15.5 × 7.5 × 7.1 )
Conditions	-40 °C to 60 °C (-40 °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)
	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
Heater	Yes
Approval	
, , , , , , ,	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
EMC	50130-4: 2011 +A1: 2014);
	RCM (AS/NZS CISPR 32: 2015);
	IC (ICES-003: Issue 7);
	KC (KN 32: 2015, KN 35: 2015)
	NO (NIV 32. 2013), NIV 33. 2013)

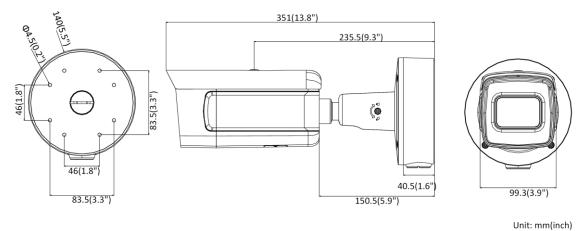


1	UL (UL 62368-1);	
Safety	CB (IEC 62368-1:2014+A11);	
	CE-LVD (EN 62368-1:2014/A11:2017);	
	BIS (IS 13252(Part 1):2010/ IEC 60950-1: 2005);	
	LOA (IEC/EN 60950-1)	
Environment	CE-RoHS (2011/65/EU);	
	WEEE (2012/19/EU);	
	Reach (Regulation (EC) No 1907/2006)	
Protection	IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)	
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)	
Automotive and Railway	EN50121-4	
Other	PVC FREE	

### Available Model

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

#### Dimension



## Accessory

#### Optional

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



Distributed by

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