

iDS-2CD7A46G0-IZHS(8)(Y) 4 MP IR Varifocal Bullet Network Camera

DarkFighter™



DeepinView^{series}

- High Quality Imaging with 4 MP Resolution
- DarkFighter Technology for Excellent Low-Light Performance
- 140 dB WDR for Clear Imaging Against Strong Backlight
- Efficient H.265+ Compression Saves Bandwidth and Storage
- Advanced Streaming Technology Enables Smooth Live View and Data Self-Correcting in Poor Networks
- 5 Streams and up to 5 Custom Streams to Meet a Wide Variety of Applications
- Water and Dust Resistant (IP67) and Vandal Proof (IK10)

Hikvision's iDS-2CD7A46G0-IZHS(Y) cameras' embedded deep learning algorithms integrate multiple intelligences. The technologies count people and sample face features simultaneously and identify people passing repeatedly over a period of time. It also activates a face alarm for entrance control and people counting.

Hard Hat Detection

With embedded deep learning algorithms, the camera detects persons in a 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 cameras detect and capture faces and human bodies in specific regions and outputs features such as gender, age, and top color. They support a structured model of the face and human body for structured data collection.

Queue Management

With embedded deep learning based algorithms, the cameras detect the number of queued people and the waiting time of each person. The body feature detection algorithm helps filter out wrong targets and increases detection accuracy.

Metadata

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

Smooth Streaming

Smooth streaming improves 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 networks, the cameras transmit redundant data for self-error correcting in the



back-end device to solve mosaic problems because of packet loss and error rate.

Anti-Corrosion Coating (-Y)

The cameras adopt high weatherproof and wearproof molding powder that confirms to AAMA2604-02 and Qualicoat (Class2) specifications and use two-layer special spraying technology, so their surfaces have excellent long-term anti-corrosion performance

and physical protection. Also, all exposed screws use SUS316 material for high anti-corrosion performance. Thus, the cameras meet anti-corrosion requirements NEMA 250-2018.

Available Models

- iDS-2CD7A46G0-IZHS: 2.8 mm–12 mm lens
- iDS-2CD7A46G0-IZHSY: 2.8 mm–12 mm lens, RS-485, anti-corrosion
- iDS-2CD7A46G0-IZHS8: 8 mm–32 mm lens

Specifications

		iDS-2CD7A46G0-IZHS	iDS-2CD7A46G0-IZHSY	iDS-2CD7A46G0-IZHS8	
Camera					
	Image Sensor	1/1.8" progressive scan CMOS			
Minimum Illumination (AGC on)	Color @ <i>f</i> /1.2	0.001 lux		---	
	B/W @ <i>f</i> /1.2	0.0003 lux		---	
	Color @ <i>f</i> /2.5	0.0043 lux		---	
	B/W @ <i>f</i> /2.5	0.0013 lux		---	
	Color @ <i>f</i> /1.7	---	0.002 lux		
	B/W @ <i>f</i> /1.7	---	0.0006 lux		
	Color @ <i>f</i> /1.73	---	0.0021 lux		
	B/W @ <i>f</i> /1.73	---	0.00062 lux		
		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			
	Power-Off Memory	Yes			
	Flash Memory	8 GB			
	RAM	2 GB			
Lens					
	Focus	Auto, semi-auto, manual			
	Lens	2.8 mm to 12 mm		8 mm to 32 mm	
FOV	Horizontal	114.5° to 41.8°		42.5° to 15.1°	
	Vertical	59.3° to 23.6°		23.3° to 8.64°	
	Diagonal	141.1° to 48°		49.6° to 17.3	
	Aperture	<i>f</i> /1.2 to <i>f</i> /2.5		<i>f</i> /1.7 to <i>f</i> /1.73	
	Lens Mount	Integrated			
	Blue Glass Module	Blue glass module to reduce ghost phenomenon			
	P-Iris	Yes			
Illuminator					
	IR Range	164 ft (50 m)		330 ft (100 m)	
	Wavelength	850 nm			
	Smart Supplement Light	Yes			
Video					
	Maximum Resolution	2680 × 1520			
	Main Stream	50 Hz: 25 fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)			
	Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)			
	Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)			
	Fourth Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)			
	Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)			
	Custom Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 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			
	H.264 Type	Baseline Profile/Main Profile/High Profile			

Specifications (continued)

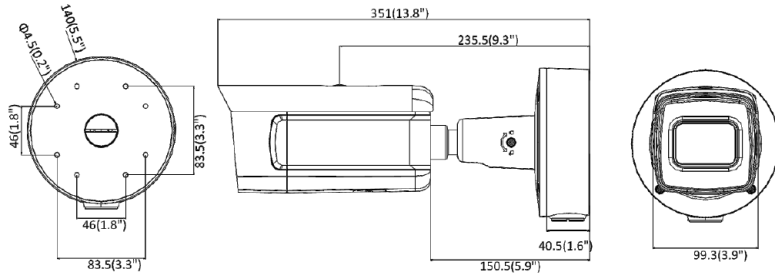
	iDS-2CD7A4660-IZHS	iDS-2CD7A4660-IZHSY	iDS-2CD7A4660-IZHS8
Video (continued)			
H.265 Type	Main Profile		
H.264+	Main Stream supports		
H.265+	Main Stream supports		
Bit Rate Control	CBR/VBR		
Stream Type	Main stream/sub-stream/third stream/fourth stream/fifth stream/custom stream		
Scalable Video Coding (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		
Audio Bit Rate	64 Kbps [G.711]/16 Kbps [G.722.1]/16 Kbps [G.726]/32-192 Kbps [MP2L2]/32 Kbps [PCM]/8-320 Kbps [MP3]		
Audio Type	Mono sound		
Network			
Simultaneous Live View	Up to 20 channels		
API	ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP		
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, 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		
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		
Network Storage	MicroSD/SDHC/SDXC card (256 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR); with high-end Hikvision memory card, memory card encryption and health detection support		
Client	iVMS-4200, Hik-Connect, HikCentral		
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	IR LEDs support Smart IR function to automatically adjust power 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 24-bit bmp format		
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS, Distortion Correction		
Image Parameters Switch	Yes		
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or Web browser		
SNR	≥52 dB		
Interface			
Alarm	2 input, 2 outputs (maximum 24 VDC, 1 A)		
Audio	1 input (line in), 3.5 mm connector, maximum input amplitude: 3.3 vpp, input impedance: 4.7K Ω, interface type: non-equilibrium; 1 output (line out), 3.5 mm connector, maximum output amplitude: 3.3 vpp, output impedance: 100 Ω, interface type: non-equilibrium, mono sound		
RS-485	---	1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)	---
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (for debugging only)		
On-Board Storage	Built-in microSD/SDHC/SDXC slot, up to 256 GB		
Hardware Reset	Yes		
Communication Interface	1 RJ-45 10 M/100 M/1000 M self-adaptive Ethernet port		
Power Output	---	12 VDC, max 200 mA (supported by all power supply types)	---
Heater	Yes		
Smart Features			
Basic Event	Motion detection, video tampering alarm, vibration detection, 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, defocus detection		
Counting	Yes		
Intelligent (Deep Learning Algorithm)			
Multi-Target-Type Detection	Simultaneous detection of human body and face Detects 8 face features and 13 human body features		
Attribute-Based People Counting	Enter/exit counting (30 targets at a time); identifies people passing repeatedly over period of time		
Hard Hat Detection	Detects up to 30 human targets simultaneously, supports up to 4 shield regions		

Specifications (continued)

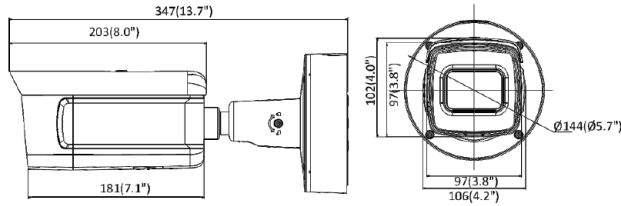
	iDS-2CD7A4660-IZHS	iDS-2CD7A4660-IZHSY	iDS-2CD7A4660-IZHS8
Intelligent (Deep Learning Algorithm) (continued)			
Queue Management	Detects queued people number and waiting time of each person; generates reports to compare efficiency of different queues, displays changing status of one queue; raw data export		
Premier Protection	Line crossing, intrusion, region entrance, region exiting; alarm triggers by specified target types (human and vehicle); filters out mistaken alarm caused by target types such as leaf, light, animal, flag, etc.		
General			
Linkage Method	Upload to FTP/NAS/memory card, notify surveillance center, send e-mail, 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, e-mail Trigger notification: HTTP, ISAPI, alarm output, e-mail		
Online Upgrade	Yes		
Dual Backup	Yes		
Web Client 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	Anti-flicker, 5 streams and up to 5 custom streams, EPTZ, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter		
Software Reset	Yes		
Storage Conditions	-40° to 60° C (-40° to 140° F). Humidity 95% or less (non-condensing)		
Startup and Operating Conditions	-40° to 60° C (-40° to 140° F). Humidity 95% or less (non-condensing)		
Power Supply	12 VDC ±20%, three-core terminal block, reverse polarity protection; PoE: 802.3at, Type 2 Class 4		
Power Consumption and Current	12 VDC, 1.33 A, maximum 16.0 W PoE: {802.3at, 42.5 V-57 V}, 0.43 A to 0.31 A, maximum 18.0 W		
Power Interface	Three-core terminal block		
Camera Material	Aluminum alloy body		
Camera Dimensions	Ø144 mm × 347 mm (Ø5.7" × 13.7") Ø140 mm × 351 mm (Ø5.5" × 13.8") Ø144 mm × 347 mm (Ø5.7" × 13.7")		
Package Dimension	405 mm × 190 mm × 180 mm (15.9" × 7.5" × 7.1")		
Camera Weight	1920 g (4.2 lb)		
With Package Weight	3060 g (6.7 lb)		
Metadata			
Metadata	Metadata of intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, object removal, face capture, and queue management		
Approvals			
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)		
Safety	UL (UL 60950-1); CB (IEC 60950-1: 2005 + Am 1:2009 + Am 2: 2013); CE-LVD (EN 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 Protection	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006) IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)		
Anti-Corrosion Protection	---	NEMA 4X (NEMA 250-2018)	---
Other	---	PVC free	---

Dimensions

-Y model:







Without -Y model:



Unit: mm(inch)

Accessories

NOT INCLUDED			
For iDS-2CD7A46G0-IZHSY		For iDS-2CD7A46G0-IZHS8 and iDS-2CD7A46G0-IZHS	
			
DS-1476ZJ-Y Corner Mount	DS-1475ZJ-Y Vertical Pole Mount	CM1 Corner Mount	PM1 Vertical Pole Mount