

iDS-2CD7046G0/E-IHSY(/F11)(R) 4 MP Box Network Camera

DarkFighter



DeepinView^{series}

- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 140 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 (IP66) 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 structured modeling of the face and human body to achieve a structured 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 SUS316 material and features high anti-corrosion performance. Therefore, the whole camera meets anti-corrosion requirements NEMA 250-2018.

▪ Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.002 Lux @ (F1.4, AGC ON); B/W: 0.0002 Lux @ (F1.4, 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
Lens	
Lens Type & FOV	3.8 to 16 mm, horizontal FOV: 109.1° to 29.6°, vertical FOV: 61.3° to 16.8°, diagonal FOV: 125.1° to 33.9° 11 to 40 mm, horizontal FOV: 39.1° to 12.1°, vertical FOV: 21.4° to 6.8°, diagonal FOV: 45.8° to 13.9°
Aperture	3.8 to 16 mm: F1.4 11 to 40 mm: constant F1.4 throughout the zoom range
Lens Mount	CS mount
Blue Glass Module	Blue glass module to reduce ghost phenomenon.
ABF	Yes
P-Iris	Yes
Illuminator	
IR Range	3.8 to 16 mm: 80 m 11 to 40 mm: 120 m
Wavelength	850 nm
Smart Supplement Light	Yes
Video	
Max. 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	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60Hz: 30fps (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
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	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PCM)/8-320Kbps(MP3)
Audio Type	Mono sound
Network	
Simultaneous Live View	Up to 20 channels
API	ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP
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) 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 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 inputs, 2 outputs (max. 24 VDC, 1 A)
Audio	-IHSY: 1 input (line in), 1 output (line out), 3.5 mm connector, 2 channels
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 micro SD/SDHC/SDXC slot, up to 256 GB
Hardware Reset	Yes
Communication Interface	1 RJ45 100M/1000M self-adaptive Ethernet port
Power Output	12 VDC, max. 200 mA (supported by all power supply types)
Fiber Optical	With F11: Yes Without /F11: No
Heater	Yes

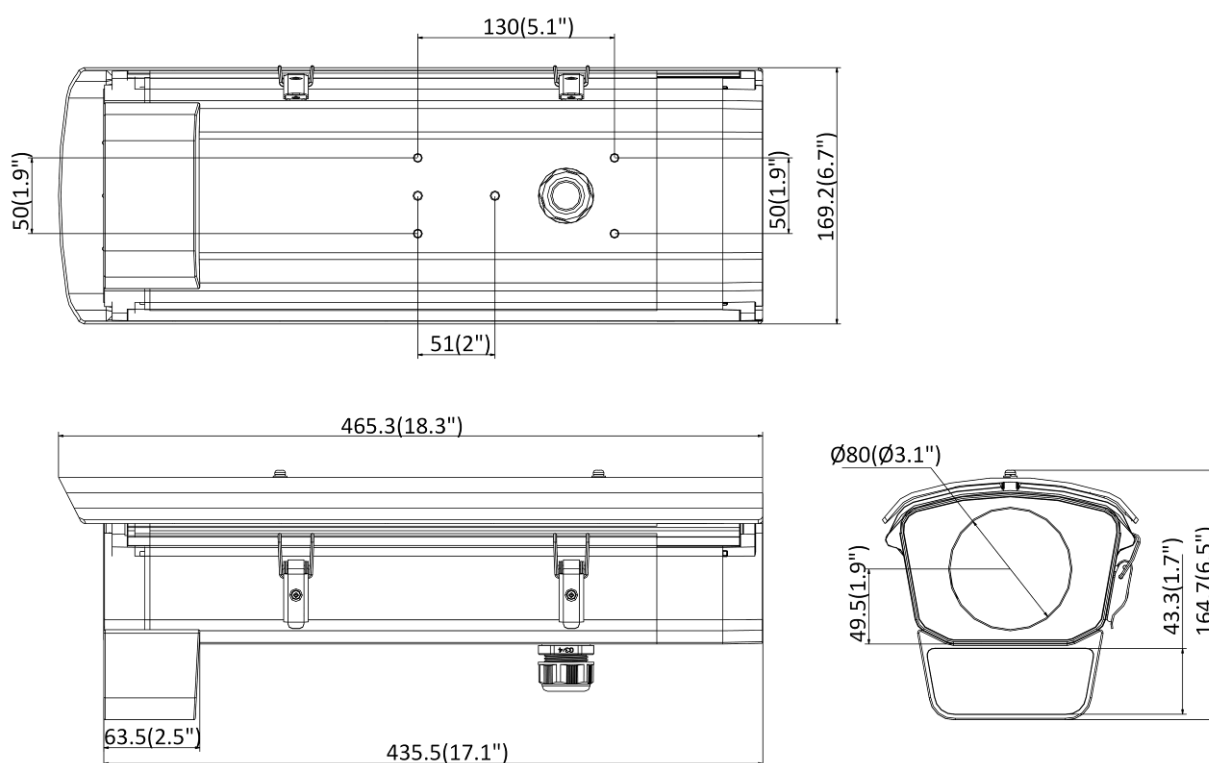
Smart Feature-Set	
Basic Event	Motion detection, video tampering alarm, vibration detection, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)
Smart Event	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions configurable Region 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)	
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
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	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-40 °C to 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)
Power Supply	24 VDC ± 20%, three-core terminal block, reverse polarity protection; 24 VAC ± 20%, three-core terminal block, reverse polarity protection; PoE: 802.3bt, Type3, Class 5
Power Consumption and Current	With F11: With extra load: 24 VDC, 1.07 A, 25.4 W; 24 VAC, 1.66 A, 50/60 Hz, 26.7 W; PoE(802.3bt, 42.5 VDC to 57 VDC), 0.7 A to 0.6 A, 29.1 W Without /F11: With extra load: 24 VDC, 1.07 A, 25.4 W; 24 VAC, 1.64 A, 50/60 Hz, 26.8 W; PoE(802.3bt, 42.5 VDC to 57 VDC), 0.7 A to 0.5 A, 28 W "With extra load" means that an extra device is connected to and powered by the camera.
Power Interface	Three-core terminal block
Camera Material	Aluminum alloy body, PP sun shield, PC front panel
Camera Dimension	465.3 × 169.2 × 164.7 mm (18.3" × 6.7 × 6.5")
Package Dimension	615 × 360 × 225 mm (24.2" × 14.2" × 8.9")
Camera Weight	3800 g (8.4 lb.)
With Package Weight	6000 g (13.2 lb.)
Anti-IR reflection bubble	Yes
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 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)
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	CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)
Protection	IP66 (IEC 60529-2013), IK10 (IEC 62262:2002)
Automotive and Railway	With -R: EN50121-4
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)
Fiber Optical	
Transfer Rate	With /F11: 155 Mbps
Interface Type	With /F11: FC interface
Fiber Type	With /F11: 1 FC fiber optical interface, SFP module, single mode, 20 km transmission distance, 1310 nm (TX) and 1550 nm (RX), 155 Mbps transmission rate
Transmission Wavelength	With /F11: TX: 1310 nm, RX: 1550 nm
Transmission Distance	With /F11: 20 km

▪ Available Model

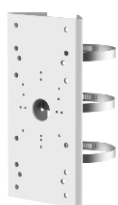
- iDS-2CD7046G0/E-IHSY (11 to 40mm)
- iDS-2CD7046G0/E-IHSY (3.8 to 16mm)
- iDS-2CD7046G0/E-IHSYR (11 to 40mm)
- iDS-2CD7046G0/E-IHSYR (3.8 to 16mm)
- iDS-2CD7046G0/E-IHSY/F11 (11 to 40mm)
- iDS-2CD7046G0/E-IHSY/F11 (3.8 to 16mm)
- iDS-2CD7046G0/E-IHSYR/F11 (11 to 40mm)
- iDS-2CD7046G0/E-IHSYR/F11 (3.8 to 16mm)

▪ Dimension



Unit: mm(inch)

▪ Accessory



DS-1275ZJ-Y
Vertical Pole Mount



DS-1214ZJ-L-Y2
Horizontal Pole Mount



DS-1214ZJ-T-Y
Horizontal Pole Mount



DS-1293ZJ-Y
Wall Mount



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