HIKVISION®

iDS-2CD7046G0(-AP)(/F11)
4MP Box Network Camera

DarkFighter

| 140dB WDR | ABF | 3D DNR | H.265+ | | P Iris |

- **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 dB 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

- Built-in microphone for real-time audio security

▪ **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.

▪ Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Min. Illumination	Color: 0.001 Lux @ (F1.2, AGC ON); B/W: 0.0003 Lux @ (F1.2, 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 Mount	DC drive. CS mount
Fixed Aperture	Constant F1.2 throughout the zoom range
Blue Glass Module	Blue glass module to reduce ghost phenomenon.
ABF	-AP: Yes
P-Iris	-P: Yes

Video	
Max. Resolution	2680 × 1520
Main Stream	50Hz: 25fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60Hz: 30fps (2680 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
Sub-Stream	50Hz: 25fps (704 × 576, 640 × 480) 60Hz: 30fps (704 × 480, 640 × 480)
Third Stream	50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 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: 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	Open Network Video Interface (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 Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2
Network Storage	microSD/SDHC/SDXC card (256 G) 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 24bit 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	≥52dB

Interface

Alarm	2 inputs, 2 outputs (max. 24 VDC, 1A)
Audio	1 input (line in), 1 output (line out), 3.5 mm connector, 2 channels, 1 built-in microphone
RS-485	1 RS-485(half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Video Output	1 Vp-p Composite Output (75Ω/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)

Smart Feature-Set

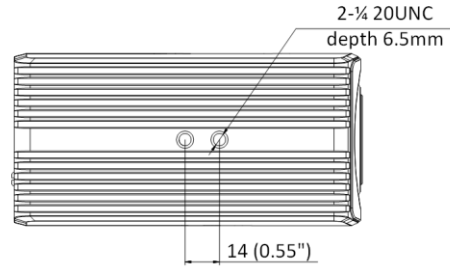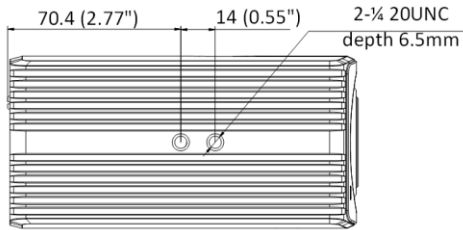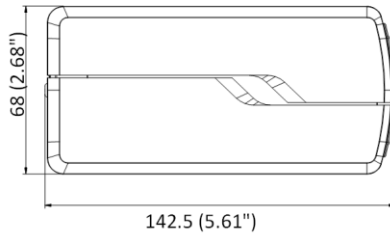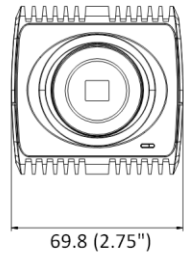|	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)

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, 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

Sustainability	Yes
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Power Supply	12 VDC ± 24.9%, two-core terminal block, reverse polarity protection; 24 VAC ± 24.9%; PoE: 802.3af, Type 1 Class 3
Power Consumption and Current	/F11: With extra load: 12VDC, 0.84A, 24VAC, 0.69A, 50/60Hz, 10.1W; PoE (802.3af,36-57VDC), 0.29-0.19A , class 3 Without /F11: With extra load: 12VDC, 1A,24VAC, 0.79A, 50/60Hz, 12W; PoE (802.3af,36-57VDC), 0.34-0.21A, class 3
Power Interface	Two-core terminal block
Camera Material	Aluminum alloy body
Camera Dimension	142.5 × 69.8 × 68 mm (5.61" × 2.75" × 2.68")
Package Dimension	315 × 140 × 140 mm (12.4" × 5.51" × 5.51")
Camera Weight	730g (1.96 lb.)
With Package Weight	1115g (2.99 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 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)
Fiber Optical	
Transfer Rate	/F11: 155 Mbps
Interface Type	/F11: LC interface
Fiber Type	/F11: 1 LC fiber optical interface, SFP module, single mode, 20 km transmission distance, 1310 nm (TX) and 1550 nm (RX), 155 Mbps transmission rate
Transmission Wavelength	/F11: TX:1310 nm, RX:1550 nm
Transmission Distance	/F11: 20 km

▪ Available Model
iDS-2CD7046G0-AP/F11, iDS-2CD7046G0-AP, iDS-2CD7046G0

▪ Dimension

69.8 (2.75") 68 (2.68") 142.5 (5.61")

70.4 (2.77") 14 (0.55") 2-¼ 20UNC depth 6.5mm 2-¼ 20UNC depth 6.5mm 14 (0.55")

Unit: mm (inch)

▪ **Accessory**

DS-1292ZJ
Wall Mount

DS-1299ZJ
Pendant Mount

DS-1332HZ
Indoor Housing

DS-1331HZ-B
Outdoor Housing
+ DS-2202ZJ
Integrated Mount

DS-1293ZJ
Wall Mount

DS-1214ZJ
Horizontal Pole
Mount

DS-1269ZJ
Pendant Mount

DS-1233ZJ
Column Mount

HV3816D-8MPIR

3.8 to 16 mm DC Iris

HV0415D-MP

4 to 15 mm DC Iris

HV1140P-8MPIRA

11 to 40 mm P-Iris

HV1140D-8MPIRA

11 to 40 mm DC Iris

HV3816P-8MPIR

3.8 to 16 mm P-iris

HV0733D-6MP

7 to 33 mm DC Iris

Distributed by

HIKVISION®

Headquarters
No.555 Qianmo Road, Binjiang District,
Hangzhou 310051, China
T +86-571-8807-5998
overseasbusiness@hikvision.com

Hikvision USA T +1-909-895-0400 sales.usa@hikvision.com	**Hikvision Europe** T +31-23-5542770 sales.eu@hikvision.com	**Hikvision UK & Ireland** T +01628-902140 sales.uk@hikvision.com	**Hikvision UAE** T +971-4-4432090 salesme@hikvision.com	**Hikvision Russia** T +7-495-669-67-99 saleru@hikvision.com
Hikvision Australia T +61-2-8599-4233 salesau@hikvision.com	**Hikvision Italy** T +39-0438-6902 info.it@hikvision.com	**Hikvision South Africa** Tel: +27 (10) 0351172 sale.africa@hikvision.com	**Hikvision Singapore** T +65-6684-4718 sg@hikvision.com	**Hikvision Korea** T +82-(0)31-731-8817 sales.korea@hikvision.com
Hikvision India T +91-22-28469900 sales@pramahikvision.com	**Hikvision Brazil** T +55 11 3318-0050 Latam.support@hikvision.com	**Hikvision France** T +33(0)1-85-330-450 info.fr@hikvision.com	**Hikvision Spain** T +34-91-737-16-55 info.es@hikvision.com	**Hikvision Poland** T +48-22-460-01-50 info.pl@hikvision.com
Hikvision Canada T +1-866-200-6690 sales.canada@hikvision.com	**Hikvision Turkey** T +90 (216)521 7070- 7074 sales.tr@hikvision.com	**Hikvision Kazakhstan** T +7-727-9730667 nikia.panfilov@hikvision.ru	**Hikvision Tashkent** T +99-87-1238-9438 uzb@hikvision.ru	**Hikvision Indonesia** T +62-21-2933759 Sales.Indonesia@hikvision.com
Hikvision Thailand T +662-275-9949 sales.thailand@hikvision.com	**Hikvision Malaysia** T +601-7652-2413 sales.my@hikvision.com	**Hikvision Vietnam** T +84-974270888 sales.vt@hikvision.com	**Hikvision Hong Kong** T +852-2151-1761 info.hk@hikvision.com	**Hikvision Colombia** sales.colombia@hikvision.com