iDS-2CD5546G2-XZ(H)S(Y)
4MP Darkfighter Moto Varifocal Dome Camera

DeepinView series

DarkFighter 2.0

Hikvision has been dedicated to develop products with security since established.

Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection.

In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security protection capability and protect your devices as well as your data from malicious cyber attacks.

- High quality imaging with 4 MP resolution

- Excellent low-light performance via Darkfighter 2.0 technology

- Clear imaging against strong back light due to 140 dB Auto-WDR technology

- 4 streams to meet a wide variety of applications

- Efficient H.265+ compression technology to save bandwidth and storage

- Water and dust resistant (IP67) and vandal proof (IK10)

- High frame rate up to 4MP@60fps

- TPM 2.0 for cyber security

▪ Function

Face Capture

With embedded deep learning based algorithms, the camera is able to give the best shot of a target face through detecting, capturing, grading and selecting. 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.

Queue Management

With embedded deep learning based algorithms, the camera detects queuing-up people number and waiting time of each person. It can generate reports to compare the efficiency of different queuing-ups and display the changing status of one queue, and supports raw data export for further analysis.

On/Off Duty Detection

With the embedded deep learning algorithms, the camera supports absence detection and on/off duty detection. It can detect the on/off duty status and people number changes in a predefined area.

Heat Map

The camera can generate a graphic description of visits (by calculating amount of people or a mount of dwell time) in a configured area.

Regional People Counting

With the embedded deep learning algorithms, the camera supports people density detection and will upload detection data through scheduled uploading, number of people change uploading and congestion level uploading. It also supports number of people exception detection and waiting time exception detection.

▪ Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON),B/W: 0.0001 Lux @ (F1.2, AGC ON),B/W: 0 Lux with IR
Shutter Time	1 s to 1/100,000 s
Day & Night	IR cut filter, Blue glass module (less ghost phenomenon)
Angle Adjustment	Pan: 0° to 355°,tilt: 0° to 75°,rotate: 0° to 355°
Lens	
Lens Type	Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 141.3° to 48.1°
	8 to 32 mm, horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°
Iris Type	P-iris
Aperture	2.8 to 12 mm: F1.47 to F2.53, 8 to 32 mm: F1.70 to F1.73
Focus	Auto,Semi-auto,Manual
DORI	
DORI	Wide:
	2.8 to 12 mm: D (Detect) : 60 m, O (Observe) : 23.8 m, R (Recognize) : 12 m, I (Identify) : 6 m
	8 to 32 mm: D (Detect) : 150.3 m, O (Observe) : 59.7 m, R (Recognize) : 30.1 m, I (Identify) : 15 m
	Tele:
	2.8 to 12 mm: D (Detect) : 149 m, O (Observe) : 59.1 m, R (Recognize) : 29.8 m, I (Identify) : 14.9 m
	8 to 32 mm:D (Detect) : 400 m, O (Observe) : 158.7 m, R (Recognize) : 80 m, I (Identify) : 40 m
	The DORI values are calculated using pixel densities for different use cases as recommended by the EN 62676-4 standard.
Illuminator	
Supplement Light Type	Hybrid (IR and White Light)
Supplement Light Range	2.8 to 12 mm: Monitoring: 40 m; 8 to 32 mm: Monitoring: 60 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
Video	
Main Stream	Monitoring mode:
	50 Hz: up to 50 fps (2560 × 1440, 1920 × 1080, 1280 × 720)
	60 Hz: up to 60 fps (2560 × 1440, 1920 × 1080, 1280 × 720)
	*High frame rate is supported under monitoring mode only.
	smart mode:
	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
	60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)

Sub-Stream	50 Hz: 25 fps (1280 × 720, 704 × 576, 640 × 480)
	60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)
	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)
Fourth Stream	50 Hz: 1 fps (704 × 576, 640 × 480)
	60 Hz: 1 fps (704 × 480, 640 × 480)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264,
	Sub-stream: H.265/H.264/MJPEG,
	Third stream: H.265/H.264,
	Fourth stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 8 Mbps
H.264 Type	Baseline Profile,Main Profile,High Profile
H.265 Type	Main Profile
Bit Rate Control	CBR,VBR
Scalable Video Coding (SVC)	H.264 and H.265 encoding
Target Cropping	Yes
Region of Interest (ROI)	4 fixed regions for each stream
Audio	
Audio Type	Mono sound
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/48 kHz
Environment Noise Filtering	Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, SRTP, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4/IPv6, UDP, Bonjour, SSL/TLS, ARP, WebSocket, WebSockets
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
	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, TLS 1.3,TPM 2.0(FIPS 140-2 level 2),AES128/256
Network Storage	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
Web Browser	Plug-in required live view: IE 10, IE 11,
	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+
Image	
Image Parameters Switch	Yes

Image Settings	Rotate mode,saturation,brightness,contrast,sharpness,gain,white balance,adjustable by client software or web browser
Day/Night Switch	Day,Night,Auto,Schedule
Wide Dynamic Range (WDR)	140 dB
Image Enhancement	BLC,HLC,3D DNR,Defog
Privacy Mask	8 programmable polygon privacy masks
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.
Image Stabilization	EIS
Interface	
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB
Alarm	-Y: 2 inputs, 2 outputs (max. 12 VDC, 30 mA), Without-Y: 1 input, 1 output (max. 12 VDC, 30 mA)
Built-in Microphone	2 built-in microphones
Audio	1 input (line in), input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium, 1 output (line out), output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium, mono sound
Reset Key	Yes
Power Output	12 VDC, max. 100 mA
RS-485	-Y: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Event	
Basic Event	Motion detection,video tampering alarm,video quality diagnosis,exception (network disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD error),vibration detection
Smart Event	scene change detection,audio exception detection,defocus detection
Linkage	Upload to FTP/NAS/memory card,notify surveillance center,send email,trigger alarm output,trigger recording,trigger capture,audible warning
Deep Learning Function	
Face Capture	Detects up to 30 faces simultaneously, Supports swing left and right from -70° to 70°, tilt up and down from -50° to 50°, Uploads face with background and closed-up face pictures
Multi-target-type Detection	Supports simultaneous detection and capture of human body, face, and vehicle, Gets face features, Gets human body features, Gets vehicle features, Supports counting the number of line crossing targets by type, including human body, non-motor vehicle, motor vehicle

Queue Management	Supports up to 8 detection regions, and independent arming schedule and linkage method, Supports 2 detection modes: regional people queuing-up, waiting time detection, 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, Supports real-time data uploading and scheduled data uploading, Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold, Waiting time detection: supports 1 alarm trigger condition, including greater than threshold
Heat Map	A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area., Two report types are available, space heat map and time heat map line chart.
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting, Support alarm triggering by specified target types (human and vehicle)
Metadata	Intrusion detection, line crossing detection, region entrance detection, region exiting detection
Regional People Counting	Supports up to 8 detection regions, and independent arming schedule and linkage method Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection Supports parameter settings: alarm times per exception, alarm interval, first alarm delay Supports searching real-time number of people People density detection: supports scheduled uploading, number of people change uploading, congestion level uploading Number of people exception detection: supports 6 alarm trigger conditions, including greater than threshold A, less than threshold A, equal to threshold A, not equal to threshold A, greater than threshold A and less than threshold B, less than threshold A or greater than threshold B (threshold A should be less than threshold B) Waiting time exception detection: supports 3 alarm trigger conditions, including greater than threshold A, less than threshold A, greater than threshold A and less than threshold B (threshold A should be less than threshold B)
On/Off Duty Detection	Supports up to 8 detection regions, and independent arming schedule and linkage method, Supports 2 detection modes: absence detection, on/off duty detection, Supports parameter settings: person on duty, absence duration
General	
Power	12 VDC ± 20%, 1.01A, max. 12.1 W, PoE: IEEE 802.3af, Type 1, Class 3, 36 V to 57 V, 0.28 A to 0.22 A, max. 13.2 W, 24 VAC ± 20%, 0.72 A, max. 10.9 W
Material	Aluminum alloy body
Dimension	Ø162 mm × 141.8 mm (Ø6.4" × 5.6")
Package Dimension	251 mm × 215 mm × 189 mm (9.9" × 8.5" × 7.5")
Weight	With -Y: Approx. 1600 g (3.53 lb.), Without -Y: Approx. 1500 g (3.31 lb.)

With Package Weight	With -Y: Approx. 2304 g (5.08 lb.), Without -Y: Approx. 2390 g (5.27 lb.)
Storage Conditions	With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing), Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing), Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
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	Heartbeat,anti-banding,one-key reset,mirror,password protection,flash log
Integrated Connector Panel	-Y: No
Approval	
EMC	CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7
Safety	CB: IEC 62368-1: 2014+A11, CE-LVD: EN 62368-1: 2014/A11: 2017, LOA: IEC/EN 60950-1
Protection	IP67: IEC 60529-2013,IK10: IEC 62262:2002
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation (EC) No 1907/2006
Anti-Corrosion Protection	-Y: NEMA 4X (NEMA 250-2018)
Transport Certification	IATA Dangerous Goods Regulations, Dangerous Goods List, International Maritime Dangerous Goods Code, Railway Dangerous Goods List
Other	PVC FREE

▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

With -Y model: This model has MODERATE PROTECTION.
Without -Y model: This model has NO SPECIFIC PROTECTION.

Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.
No specific protection	Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

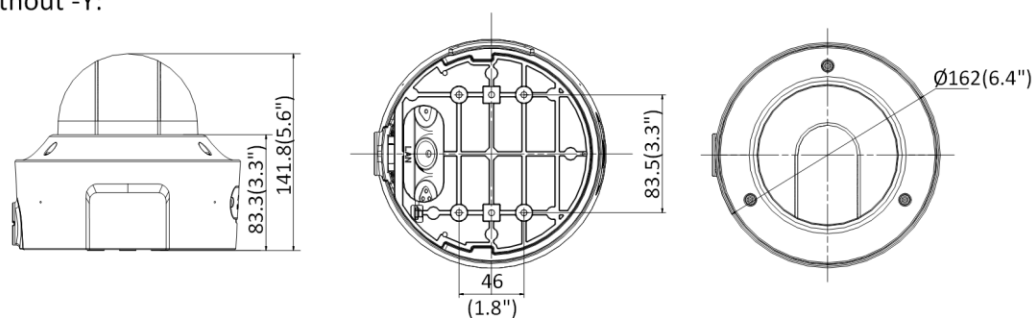### ▪ Available Model

iDS-2CD5546G2-XZS(2.8-12mm)

iDS-2CD5546G2-XZS(8-32mm)
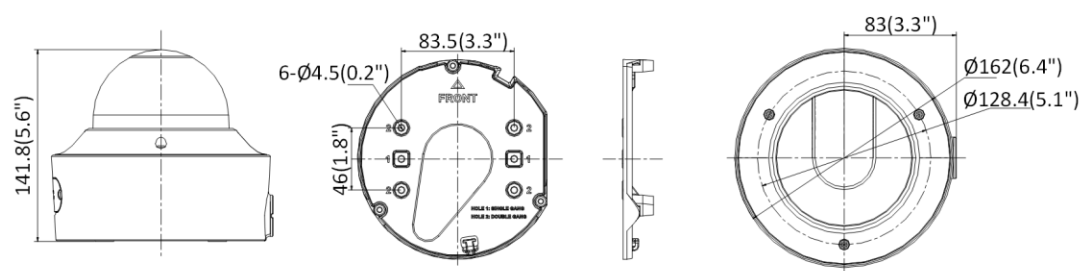
iDS-2CD5546G2-XZHSY(2.8-12mm)

iDS-2CD5546G2-XZHSY(8-32mm)
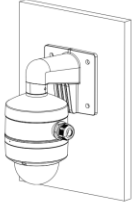
▪ Dimension

Without -Y:

With -Y:
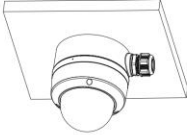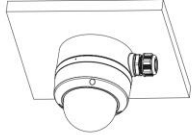
Unit: mm (inch)

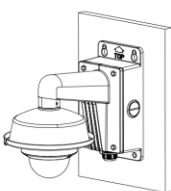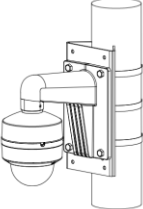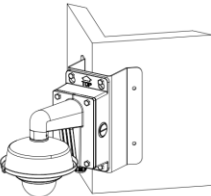### ▪ Accessory

▪ Optional

DS-1272ZJ-120	DS-1275ZJ-SUS	DS-1276ZJ-SUS	DS-1271ZJ-120	DS-2280ZJ-WA120

DS-1280ZJ-DM46	DS-1272ZJ-120B

▪ **Installation Methods**

Wall Mounting DS-1272ZJ-120+DS-1280ZJ-DM46	Wall Mounting DS-1272ZJ-120B+DS-1253ZJ-M	Vertical Pole Mounting DS-1275ZJ-SUS+DS-1272ZJ-120	Corner Mounting DS-1276ZJ-SUS+DS-1253ZJ-M+DS-2200ZJ-WAJ-120	Pendant Mounting DS-1271ZJ-120

Junction Box DS-2280ZJ-WA120	Junction Box DS-1280ZJ-DM46

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