HIKVISION®

iDS-2CD7A45G0-IZ(H)S(Y)
4 MP 25 × IR Varifocal Bullet Network Camera

140dB WDR | **NO** | **H.265+** | **P Iris** | **smart 60FPS**

· DeepinView series

- High quality imaging with 4 MP resolution
- 25 × optical zoom captures details in remote area
- Clear imaging against strong back light due to 140 dB WDR technology
- Efficient H.265+ compression technology to save bandwidth and storage
- Built-in heater on the front viewing window to ensure clear image under snowy weather
- Built-in gyroscope to ensure stable image output
- Water and dust resistant (IP67) and vandal proof (IK10)

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▪ Function

Face Recognition

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.

Multi-Target-Type Detection

With the embedded deep learning algorithms, the camera detects and captures the face, human body, vehicle in the specified region.

▪ Specification

Camera	
Image Sensor	1/2.5" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Min. Illumination	Color: 0.009 Lux @ (F1.6, AGC ON), B/W: 0.0018 Lux @ (F1.6, AGC ON), 0 Lux with IR
Shutter Time	1 s to 1/30,000 s
Day & Night	IR cut filter
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°
Lens	
Focal Length & FOV	4.7 to 118 mm, horizontal FOV 58° to 2.8°, vertical FOV 32.3° to 1.6°, diagonal FOV 63° to 3°
Focus	Auto, semi-auto, manual
Iris Type	P-iris
Aperture	4.7 to 118 mm: F1.6 to F3.8
DORI	
DORI	Wide: D: 106 m, O: 42.1 m, R: 21.2 m, I: 10.6 m Tele: D: 2200 m, O: 873 m, R: 440 m, I: 220 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	Up to 200 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
Video	

Main Stream	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
	       50 fps (2560 × 1440, 1920 × 1080, 1280 × 720)
	60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)
	       60 fps (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 (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream/Fourth stream/Fifth stream: H.265/H.264/MJPEG Third stream: H.265/H.264
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

Region of Interest (ROI)	4 fixed regions for each stream
Target Cropping	Yes
e-PTZ	Supports Patrol and Auto-tracking settings
Audio	
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3
Audio Type	Mono sound
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz
Environment Noise Filtering	Yes
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)
Network	
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
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
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, Hik-Central
Web Browser	Plug-in required live view: IE10+ Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 12+ Local service: Chrome 57.0+, Firefox 52.0+
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
Wide Dynamic Range (WDR)	140 dB
Image Enhancement	BLC, HLC, Defog, 3D DNR
SNR	≥ 52 dB
Privacy Mask	8 programmable polygon privacy masks, mask color or mosaic configurable
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit bmp format
Image Stabilization	EIS (Built-in gyroscope to improve EIS performance)
Interface	
Video Output	1 Vp-p Composite Output (75 Ω/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	1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium; 1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 vpp, output impedance: 100 Ω, interface type: non-equilibrium
Alarm	2 inputs, 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	
Basic Event	Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection
Smart Event	Line crossing detection, intrusion detection, region entrance, region exiting (support alarm triggering by specified target types (human and vehicle)) 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
Deep Learning Function	
Multi-target-type Detection	Detects up to 60 taregets simultaneously Supports simultaneous detection and capture of human body, face and vehicle Gets 7 face features, 13 human body features and 2 vehicle features
Face Capture	1. Detects up to 60 faces simultaneously 2. Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30° 3. Uploads face with background and closed-up face pictures
Face Comparison	Up to 10 face libraries. Up to 30,000 faces for each library. 150,000 faces in total. Supports face library encryption
General	
Power	-IZHSY: 12 VDC ± 20%, 1.73 A, max. 20.7 W, three-core terminal block 24 VAC ± 20%, 1.31 A, max. 19.9 W, three-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.46 A to 0.35 A, max. 19.5 W -IZHS: 12 VDC ± 20%, 1.62 A, max. 19.4 W, two-core terminal block 24 VAC ± 20%, 1.21 A, max. 18.7 W, two-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.43 A to 0.32 A, max. 18.2 W -IZSY: 12 VDC ± 20%, 1.13 A, max. 13.48 W, three-core terminal block 24 VAC ± 20%, 0.89 A, max. 12.14 W, three-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.22 A to 0.29 A, max. 12.29 W -IZS: 12 VDC ± 20%, 1.02 A, max. 12.22 W, two-core terminal block 24 VAC ± 20%, 0.8 A, max. 11.49 W, two-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.20 A to 0.26 A, max. 10.50 W
Material	Aluminum alloy body

Dimension	With -Y: Ø140 mm × 378.4 mm (Ø5.5" × 14.9") Without -Y: Ø144.1 mm × 375.2 mm (Ø5.7" × 14.8")
Package Dimension	425 mm × 190 mm × 180 mm (16.7" × 7.5" × 7.1")
Weight	With -Y: Approx. 2160 g (4.8 lb.) Without -Y: Approx. 2130 g (4.7 lb.)
With Package Weight	With -Y: Approx. 3310 g (7.3 lb.) Without -Y: Approx. 3200 g (7.1 lb.)
Storage Conditions	Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing) With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-40 °C to 60 °C (-40 °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	5 streams, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter
Heater	Yes
De-icing	Yes
Approval	
EMC	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 50130-4: 2011+A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 62368-1); 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)
Other	PVC FREE

▪ **Available Model**
iDS-2CD7A45G0-IZHSY (4.7 to 118 mm)
iDS-2CD7A45G0-IZHS (4.7 to 118 mm)
iDS-2CD7A45G0-IZSY (4.7 to 118 mm)
iDS-2CD7A45G0-IZS (4.7 to 118 mm)
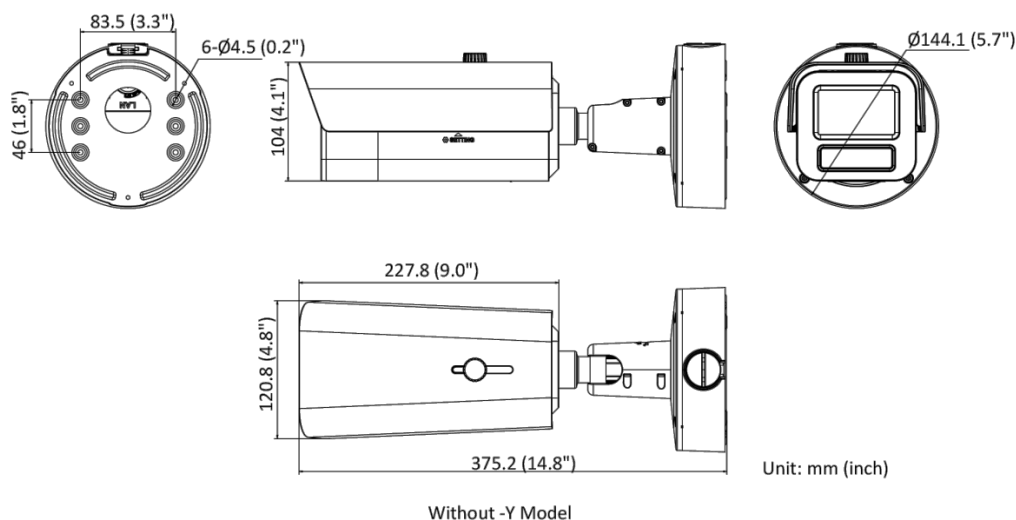
▪ Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.
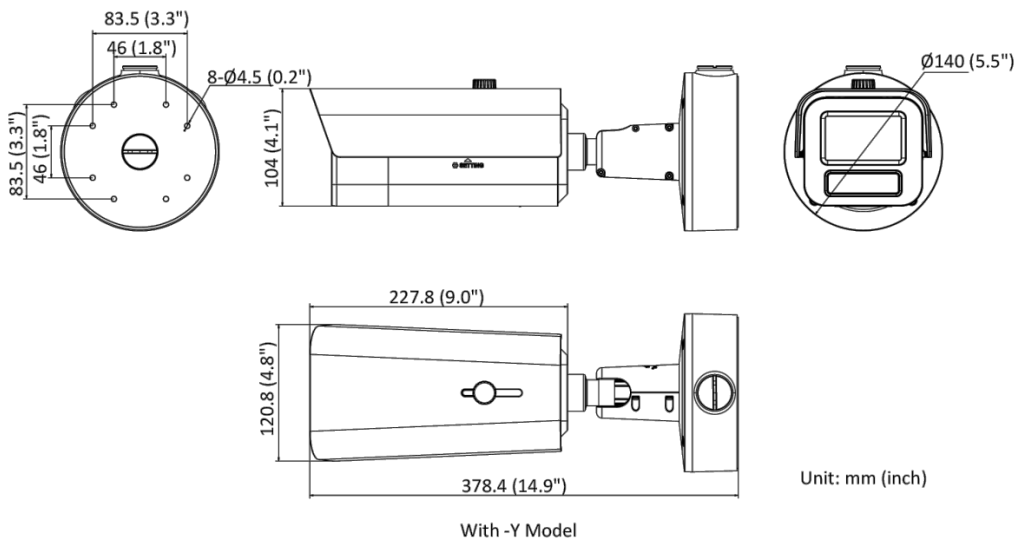
-Y model: This model has MODERATE PROTECTION.
Without -Y model: This model has NO SPECIFIC PROTECTION.

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.

▪ Dimension

Without -Y Model

83.5 (3.3")
46 (1.8")
8-Ø4.5 (0.2")
83.5 (3.3")
46 (1.8")
104 (4.1")
Ø140 (5.5")

227.8 (9.0")
120.8 (4.8")
378.4 (14.9")

Unit: mm (inch)

With -Y Model

▪ **Accessory**

▪**Optional**

DS-1275ZJ-S-SUS	DS-1476ZJ-SUS	DS-1476ZJ-Y	DS-1475ZJ-Y	DS-1475ZJ-SUS
Vertical Pole Mount	**Corner Mount**	**Corner Mount**	**Vertical Pole Mount**	**Vertical Pole Mount**

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