

# DS-2CD3786G2-IZS 8 MP AcuSense IR Varifocal Dome Network Camera



Empowered by deep learning algorithms, Hikvision AcuSense technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.

- Supports Hikvision Embedded Open Platform (HEOP) and importing third party applications
- Supports 1.5 Tops computing power, 40 MB system memory, 350 MB smart RAM, and 2 GB eMMC storage for sharing resources
- High quality imaging with 8 MP resolution
- Excellent low-light performance with powered-by-DarkFighter technology
- Clear imaging against strong backlight due to 120 dB true WDR technology
- Efficient H.265+ compression technology
- Focus on human and vehicle targets classification based on deep learning
- 3D DNR technology delivers clean and sharp images
- Motorized varifocal lens for easy installation
- Water and dust resistant (IP66) and vandal-resistant (IK10)



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# Specification

Camera					
Image Sensor	1/1.8" Progressive Scan CMOS				
Max. Resolution	3840 × 2160				
Min. Illumination	Color: 0.003 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR				
Shutter Time	1/3 s to 1/100,000 s				
Day & Night	IR cut filter				
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°				
Lens					
Lens Type	Varifocal lens, motorized lens, 2.7 to 13.5 mm and 7 to 35 mm optional				
	2.7 to 13.5 mm: horizontal FOV 108° to 46°, vertical FOV 58° to 26°, diagonal FOV 127°				
Focal Length & FOV	to 52°				
	7 to 35 mm: horizontal FOV 42° to 15°, vertical FOV 23° to 9°, diagonal FOV 49° to 17°				
Lens Mount	2.7 to 13.5 mm: Ø14; 7 to 35 mm: Integrated				
Iris Type	Auto-iris				
Focus	Auto, Semi-auto, Manual				
Aperture	F1.6				
DORI					
DORI	2.7 to 13.5 mm: D: 86 to 192 m, O: 34 to 76 m, R: 17 to 38 m, I: 8 to 19 m				
DORI	7 to 35 mm: D: 218 to 580 m, O: 86 to 230 m, R: 43 to 116 m, I: 21 to 58 m				
Illuminator					
Supplement Light Type	IR				
Supplement Light Range	2.7 to 13.5 mm: up to 40 m; 7 to 35 mm: up to 50 m				
Smart Supplement Light	Yes				
IR Wavelength	850 nm				
HEOP					
	Memory: 40 MB,				
Open Resources	Smart RAM: 350 MB,				
	eMMC: 2 GB				
Computing Power	1.5 TOPS				
Open Capability	HEOP 2.0 OpendevSDK				
Deep Learning Structure	Caffe, PyTorch, TensorFlow, PaddlePaddle, ONNX				
Programming Language	C, C++				
Video					
	50 Hz:				
Main Stream	25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)				
	60 Hz:				
	24 fps (3840 × 2160)				
	30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)				
Sub-Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)				
	60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)				
Third Stream	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)				
	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)				



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Fourth Stream	50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)				
i bui th Stream	60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)				
	Main stream: H.265/H.264/H.264+/H.265+,				
Video Compression	Sub-stream: H.265/H.264/MJPEG,				
video compression	Third stream: H.265/H.264,				
	Fourth stream: H.265/H.264/MJPEG				
Video Bit Rate	32 Kbps to 16 Mbps				
Н.264 Туре	Baseline Profile, Main Profile, High Profile				
Н.265 Туре	Main Profile				
Bit Rate Control	CBR, VBR				
Scalable Video Coding (SVC)	H.264 and H.265 encoding				
Region of Interest (ROI)	5 fixed regions for main stream and sub-stream				
Target Cropping	Yes				
Audio					
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC				
	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps				
Audio Bit Rate	(MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)				
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz				
Environment Noise Filtering	Yes				
Network					
	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP,				
Protocols	IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SFTP, ARP, SNMP,				
	WebSocket, WebSockets, SRTP				
Simultaneous Live View	Up to 6 channels				
API	ONVIF (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP				
	Up to 32 users				
User/Host	3 user levels: administrator, operator, and user				
	Password protection, complicated password, HTTPS encryption, 802.1X authentication				
	(EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest				
Security	authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, RTP/RTSP				
	over HTTPS, control timeout settings, security audit log, TLS 1.1/1.2/1.3, host				
	authentication (MAC address)				
	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR),				
Network Storage	Together with high-end Hikvision memory card, memory card encryption and health				
	detection are supported.				
Client	iVMS-4200, Hik-Connect, Hik-Central				
	Plug-in required live view: IE 10, IE 11,				
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+,				
	Local service: 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)	120 dB				
Image Enhancement	BLC, HLC, 3D DNR, Defog				



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SNR	≥ 52 dB				
Privacy Mask	4 programmable polygon privacy masks				
Interface					
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 512 GB				
On Doard Storage	1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 Vpp, input impedance:				
Audio	4.7 K $\Omega$ , interface type: non-equilibrium,				
	1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 Vpp, output				
	impedance: 100 $\Omega$ , interface type: non-equilibrium				
Alarm	1 input, 1 output (max. 24 VDC/24 VAC, 1 A)				
Reset Key	Yes				
Event					
27011	Motion detection (support alarm triggering by specified target types (human and				
Basic Event	vehicle)), video tampering alarm, exception				
	Line crossing detection, intrusion detection, region entrance detection, region exiting				
Smart Event	detection (support alarm triggered by specified target types (human and vehicle)),				
	scene change detection, audio exception detection, defocus detection				
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm				
Linkage	output, trigger recording, trigger capture, audible warning				
Deep Learning Function					
Face Capture	Yes				
People Counting	Yes				
General					
	12 VDC ± 25%, 1.25 A, max. 15 W, two-core terminal block,				
Power	PoE: IEEE 802.3at, Class 4, max. 18 W				
Material	Metal				
Dimension	Ø153.5 mm × 133.1 mm (Ø6.0" × 5.2")				
Package Dimension	244 mm × 174 mm × 173 mm (9.6" × 6.9" × 6.8")				
Weight	Approx. 885 g (1.9 lb.)				
With Package Weight	Approx. 1750 g (3.9 lb.)				
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)				
General Function	Heartbeat, anti-banding, mirror, flash log, password reset via email, pixel counter				
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				
Approval					
EMC	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN				
	50130-4: 2011 +A1: 2014,				
	IC: ICES-003: Issue 7,				
	KC: KN32: 2015, KN35: 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		
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		

## 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.

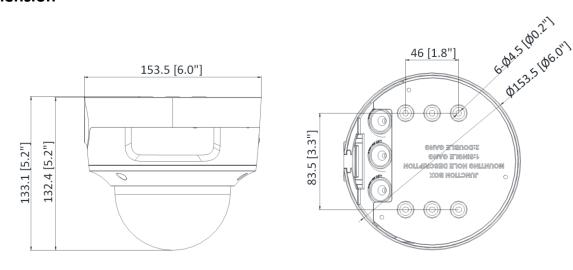
This model has NO SPECIFIC PROTECTION.

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

DS-2CD3786G2-IZS (2.7 to 13.5 mm) (H) DS-2CD3786G2-IZS (7 to 35 mm) (H)

### Dimension



Unit: mm (inch)



### Accessory

### Optional

DS-1473ZJ-155B Wall Mount	DS-1476ZJ-SUS Corner Mount	DS-1253ZJ-L Rain Shade	DS-1471ZJ-155 Pendant Mount	DS-1227ZJ-DM37 In-Ceiling Mount
e				
DS-1473ZJ-155 Wall Mount	DS-1475ZJ-SUS Vertical Pole Mount			

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