

DS-2CD3786G2HT-LIZS(U)(Y) 8 MP Dual Illumination Varifocal Dome Network Camera





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.

- 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
- Motorized varifocal lens for easy installation and monitoring
- Smart Dual-Light: advanced technology with long range
- Clear imaging against strong backlight due to 130 dB WDR technology
- Motorized varifocal lens for easy installation and monitoring
- Efficient H.265+ compression technology
- Water and dust resistant (IP67) 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: 0.0028 Lux @ (F1.2, AGC ON), 0 Lux with light
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
Focal Length & FOV	2.7 to 13.5 mm, horizontal FOV 112.3° to 41.2°, vertical FOV 58.1° to 23.1°, diagonal
	FOV 137.4° to 47.3°
Lens Mount	Integrated
Iris Type	DC iris
Focus	Auto, Semi-auto, Manual
Aperture	Max. F1.2
Depth of Field	1 m to ∞
DORI	
DORI	Wide: D: 87 m, O: 35 m, R: 17 m, I: 9 m
	Tele: D: 216 m, O: 86 m, R: 43 m, l: 22 m
Illuminator	
Supplement Light Type	IR, White Light
Supplement Light Range	Up to 40 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:
	25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)
Main Stream	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)
	*Third stream is supported under certain settings.



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	50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)
Fourth Stream	60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)
	*Fourth stream is supported under certain settings.
Video Compression	Main stream: H.265/H.264/H.264+/H.265+,
	Sub-stream: H.265/H.264/MJPEG,
	Third stream: H.265/H.264,
	Fourth stream: H.265/H.264/MJPEG,
	*Third stream and fourth stream are supported under certain settings.
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.711ulaw/G.711alaw/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,
Protocols	WebSocket, WebSockets, SRTP
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (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 Open Network
Security	Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS
	1.1/1.2/1.3, host authentication (MAC address)
Notwork Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR),
Network Storage	Together with high-end Hikvision memory card, memory card encryption and health
Client	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



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Wide Dynamic Range (WDR)	130 dB
Image Enhancement	BLC, HLC, 3D DNR, Defog
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
Built-in Microphone	-U: Yes, 2 built-in microphones
	1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input
Audio	impedance: 4.7 KΩ, interface type: non-equilibrium,
	1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output
	impedance: 100 $\Omega$ , interface type: non-equilibrium
Alarm	2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)
Reset Key	Yes
Power Output	12 VDC, max. 100 mA
Event	
	Motion detection (support alarm triggering by specified target types (human and
Basic Event	vehicle)), video tampering alarm, exception
	Unattended baggage detection, object removal detection, scene change
Smart Event	detection, audio exception detection, defocus detection
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger
Linkage	recording, trigger capture, trigger alarm output, audible warning
Deep Learning Function	
Face Capture	Yes
People Counting	Yes
	Line crossing detection, intrusion detection, region entrance detection, region exiting
Perimeter Protection	detection,
	Support alarm triggered by specified target types (human and vehicle)
General	
	12 VDC ± 25%, 1.05 A, max. 12.6 W, Ø5.5 mm coaxial power plug, reverse polarity
Power	protection,
	PoE: IEEE 802.3at, Class 4, max. 15 W
Material	Metal
Dimension	Ø141 mm × 112 mm (Ø5.6" × 4.4")
Package Dimension	244 mm × 174 mm × 173 mm (9.6" × 6.9" × 6.8")
Weight	Approx. 820 g (1.8 lb.)
With Package Weight	Approx. 1200 g (2.6 lb.)
Storage 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
Startup and Operating	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Conditions	
	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,
Language	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,
LIVIC	RCM: AS/NZS CISPR 32: 2015,
	IC: ICES-003: Issue 7
	UL: UL 62368-1,
Safety	CB: IEC 62368-1: 2014+A11,
	CE-LVD: EN 62368-1: 2014/A11: 2017
Environment	CE-RoHS: 2011/65/EU,
Environment	WEEE: 2012/19/EU
Protection	IP67: 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.

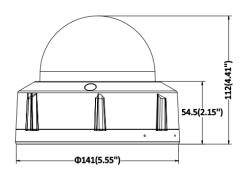
Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti- corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped 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.

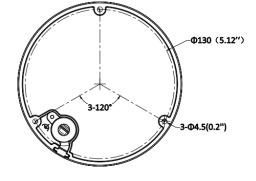
## Available Model

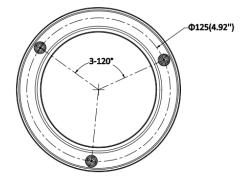
DS-2CD3786G2HT-LIZSU (2.7 to 13.5 mm)



#### Dimension







Unit:mm(inch)

## Accessory

#### Optional



