

HIKVISION

iDS-2CD7A86G0/H-IZHS(Y) 8 MP IR Varifocal Bullet Network Camera



- Hikvsion Embedded Open Platform 2.0 for 3rd party integration
- Supports 2 Tops computing power, 150 MB system memory, 1024 MB smart RAM, and 2 GB eMMC storage for sharing resources
- High quality imaging with 8 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 120 dB true WDR technology
- Efficient H.265+ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Water and dust resistant (IP67) and vandal proof (IK10)



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Specification

Camera	
Image Sensor	1/1.8" Progressive Scan CMOS
Max. Resolution	3840 × 2160
Min. Illumination	Color: 0.002 Lux @ (F1.0, AGC ON), B/W: 0.001 Lux @ (F1.0, AGC ON), B/W: 0 Lux with IR
Shutter Time	1 s to 1/100,000 s
Day & Night	IR cut filter
Lens	
Focal Length & FOV	 2.8 to 12 mm, horizontal FOV 112.3° to 41.2°, vertical FOV 58° to 23.1°, diagonal FOV 137.4° to 47.3° 8 to 32 mm, horizontal FOV 41.8° to 15.0°, vertical FOV 22.9° to 8.5°, diagonal FOV 48.7° to 17.1°
Focus	Auto, Semi-auto, Manual
Iris Type	P-iris
Aperture	2.8 to 12 mm: F1.2, 8 to 32 mm: F1.6
DORI	
DORI	2.8 to 12 mm: D: 216.0 m, O: 85.7 m, R: 43.2 m, I: 21.6 m 8 to 32 mm: D: 580.0 m, O: 230.2 m, R: 116.0 m, I: 58.0 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	2.8 to 12 mm: Monitoring: 50 m; 8 to 32 mm: Monitoring: 100 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
HEOP	
Open Resources	Memory: 150 MB, Smart RAM: 1024 MB, eMMC: 2 GB
Computing Power	2 TOPS
Open Capability	HEOP 2.0 OpendevSDK
Deep Learning Structure	Caffe, PyTorch, TensorFlow
Programming Language	C, C++
Video	
Main Stream	50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (3840 × 2160, 3072 × 1728, 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)



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	Main stream: H.265+/H.265/H.264+/H.264,
	Sub-stream: H.265/H.264/MJPEG,
Video Compression	Third stream: H.265/H.264,
	Fourth stream: H.265/H.264/MJPEG,
	Fifth stream: H.265/H.264/MJPEG
Video Bit Rate	32 Kbps to 16 Mbps
H.264 Type	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)	4 fixed regions for each stream
	Yes
Target Cropping	fes
Audio	
Audio Type	
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/44.1 kHz/48 kHz
Environment Noise Filtering	Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP,
	UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, WebSocket, WebSocket
Simultaneous Live View	Up to 20 channels
API	Open Network Video Interface (Profile S, Profile G), ISAPI, SDK, ISUP
User/Host	Up to 32 users
User/host	3 user levels: administrator, operator, and user
	Password protection, complicated password, HTTPS encryption, 802.1X authenticatio
	(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
	Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log,
	TLS 1.1, TLS 1.2, TLS 1.3
Client	iVMS-4200, Hik-Connect
	Plug-in required live view: IE 10, IE 11,
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+,
	Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+
	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.
Image	
mage Parameters Switch	Yes
	Rotate mode, saturation, brightness, contrast, sharpness, AGC, white balance,
Image Settings	adjustable by client software or web browser
Day/Night Switch	Day, Night, Auto, Schedule, Alarm Trigger
Wide Dynamic Range (WDR)	120 dB
Image Enhancement	BLC, HLC, 3D DNR, Defog
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SNR	≥ 52 dB
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.
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
On Dourd Storage	1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp,
Audio	input impedance: 4.7 K Ω , interface type: non-equilibrium,
	1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp,
	output impedance: 100 Ω , interface type: non-equilibrium, mono sound
Alarm	2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
	Yes
Reset Key	
Power Output	12 VDC, max. 100 mA
Event	Mation detection wides townships claum, naturally discompated. ID address conflict
Basic Event	Motion detection, video tampering alarm, network disconnected, IP address conflict,
	illegal login, HDD full, HDD error, abnormal restart, video quality diagnosis
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
General	
_	12 VDC ± 20%, 1.4 A, max. 16.8 W, three-core terminal block, reverse polarity
Power	protection,
	PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.48 A to 0.36 A, max. 20 W
Material	Aluminum alloy body
Dimension	Ø140 mm × 351 mm (Ø5.5" × 13.8")
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")
Weight	Approx. 1955 g (2.0 lb.)
With Package Weight	Approx. 3093 g (3.0 lb.)
Storage Conditions	-30 °C to 60 °C (-22 °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)
	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,
Languaga	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,
Language	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
General Function	Heartbeat, one-key reset, mirror, password protection, pixel counter, anti-banding
Cable Length	0.25 m (0.8 ft.)
Approval	
ЕМС	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN
	50130-4: 2011 +A1: 2014, EN50121-4,
	RCM: AS/NZS CISPR 32: 2015,
	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,
	LOA: IEC/EN 60950-1
Environment	CE-RoHS: 2011/65/EU,
	WEEE: 2012/19/EU,
	Reach: Regulation (EC) No 1907/2006
Protection	IP67: IEC 60529-2013, IK10: IEC 62262:2002
Anti-Corrosion Protection	-Y: NEMA 4X (NEMA 250-2018)
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.

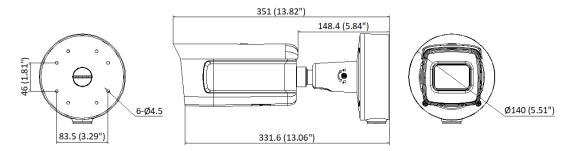
Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti- corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped 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-2CD7A86G0/H-IZHSY(2.8-12mm) iDS-2CD7A86G0/H-IZHSY(8-32mm)



Dimension



Unit: mm (inch)

Accessory

Optional



