

## **DS-2CD2047G2H-LI(U)**

4 MP Smart Hybrid Light with ColorVu Fixed Mini Bullet Network Camera













- High quality imaging with 4 MP resolution
- Smart Hybrid Light: advanced technology with long range
- Clear imaging against strong back light due to 130 dB WDR technology
- Efficient H.265+ compression technology
- Focus on human and vehicle classification based on deep learning
- -U: Built-in microphone for real-time audio security
- Water and dust resistant (IP67)



# Specification

Camera			
Image Sensor	1/1.8" Progressive Scan CMOS		
Max. Resolution	2688 × 1520		
Min. Illumination	Color: 0.0005 Lux @ (F1.0, 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 360°, tilt: 0° to 90°, rotate: 0° to 360°		
Lens			
Lens Type	Fixed focal lens, 2.8 and 4 mm optional		
Focal Length & FOV	2.8 mm, horizontal FOV 104.0°, vertical FOV 54.4°, diagonal FOV 126.7°		
	4 mm, horizontal FOV 89.2°, vertical FOV 45.5°, diagonal FOV 108.2°		
Lens Mount	M16		
Iris Type	Fixed		
Aperture	F1.0		
Donth of Field	2.8 mm: 2.5 m to ∞		
Depth of Field	4 mm: 3.1 m to ∞		
DORI			
DORI	2.8 mm: D: 61 m, O: 24 m, R: 12 m, I: 6 m		
DON	4 mm: D: 75 m, O: 30 m, R: 15 m, I: 7 m		
Illuminator			
Supplement Light Type	IR, White Light		
Supplement Light Range	Up to 40 m		
Smart Supplement Light	Yes		
IR Wavelength	850 nm		
Video			
Main Stream	50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)		
Wall Stream	60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)		
Sub-Stream	50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)		
Sub-Stream	60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360)		
	50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)		
Third Stream	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)		
	*The third stream is supported under certain settings.		
	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,		
	*Third stream is supported under certain settings.		
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)	1 fixed region for main stream and sub-stream		
Audio			
Audio			



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Audio Bit Rate	-U: 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/16 Kbps to 64 Kbps (AAC-LC)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)		
Audio Sampling Rate	-U: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz		
Environment Noise Filtering	-U: Yes		
Network	0.163		
THE COLOR	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, NTP, UPnP,		
Protocols	SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP,		
	WebSocket, WebSockets, SRTP, SFTP		
Simultaneous Live View	Up to 6 channels		
API	Open Network Video Interface (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP		
Hear/Hast	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		
	Video Interface, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS		
	1.1/1.2/1.3, host authentication (MAC address)		
Network Storage	NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)		
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		
Image Enhancement	BLC, HLC, 3D DNR		
SNR	≥ 52 dB		
Wide Dynamic Range (WDR)	130 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 GE		
Built-in Microphone	-U: Yes		
Reset Key	Yes		
Event			
Basic Event	Motion detection (support alarm triggering by specified target types (human and		
	vehicle)), video tampering alarm, exception		
Linkage	Upload to FTP/NAS/memory card, notify surveillance center, trigger recording, trigger		
	capture, send email		
Smart Event	Scene change detection		
Deep Learning Function			
Face Capture	Yes		
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting		
	Support alarm triggering by specified target types (human and vehicle)		



General		
Power	12 VDC ± 25%, 0.45 A, max. 5.5 W, Ø5.5 mm coaxial power plug, reverse polarity	
	protection,	
	PoE: IEEE 802.3af, Class 3, max. 7 W	
Material	Front cover: Metal, body: Metal, bracket: Metal	
Dimension	Ø74.4 mm × 179.2 mm (Ø2.9" × 7.1")	
Package Dimension	234 mm × 120 mm × 117 mm (9.2" × 4.7" × 4.6")	
Weight	Approx. 525 g (1.2 lb.)	
With Package Weight	Approx. 750 g (1.7 lb.)	
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)	
Startup and Operating	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)	
Conditions	-50 C to 60 C (-22 F to 140 F). Hullilatty 95% of less (non-condensing)	
General Function	Heartbeat, mirror, password reset via email, pixel counter, anti-banding	
	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		
	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN	
	50130-4: 2011 +A1: 2014,	
EMC	IC: ICES-003: Issue 7,	
	KC: KN32: 2015, KN35: 2015,	
	RCM: AS/NZS CISPR 32: 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	
Protection	IP67: IEC 60529-2013	

# 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-2CD2047G2H-LI(2.8mm)

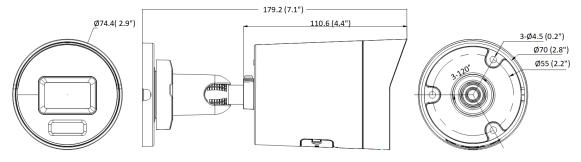
DS-2CD2047G2H-LI(4mm)

DS-2CD2047G2H-LIU(2.8mm)

DS-2CD2047G2H-LIU(4mm)

DS-2CD2047G2H-LIU(2.8mm)/Black

## Dimension



Unit: mm (inch)

# Accessory

## Optional

DS-1275ZJ-SUS	DS-1276ZJ-SUS	DS-1280ZJ-XS
Vertical Pole Mount	Corner Mount	Junction Box
6		
DS-1275ZJ-SUS(Black)	DS-1276ZJ-SUS(Black)	DS-1280ZJ-XS(Black)
Vertical Pole Mount	Corner Mount	Junction Box