DS-2CD3048G2-LI(U）
4 MP Dual Illumination Fixed Bullet Network Camera

- High quality imaging with 4 MP resolution
- Smart Dual-Light: advanced technology with long range
- Clear imaging against strong back light due to 120 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	1/3" Progressive Scan CMOS
Max. Resolution	2688 × 1520
Min. Illumination	Color: 0.001 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 100.2°, vertical FOV 54.7°, diagonal FOV 119.7° 4 mm, horizontal FOV 81.1°, vertical FOV 44.7°, diagonal FOV 94.6°
Lens Mount	M12
Iris Type	Fixed
Aperture	F1.0
Depth of Field	2.8 mm: 1.9 m to ∞ 4 mm: 2.5 m to ∞
DORI	
DORI	2.8mm: D: 63 m, O: 25 m, R: 12 m, I: 6 m 4mm: D: 78 m, O: 31 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
HEOP	
Open Resources	Memory: 60 MB, Smart RAM: 400 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	
Main Stream	50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
Sub-Stream	50 Hz: 25 fps (1280 x 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 x 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) *The third stream is supported under certain settings.
Fourth Stream	50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360) *The 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, *The third stream and the fourth stream are 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)	5 fixed regions for main stream and sub-stream
Target Cropping	Yes
Audio	
Audio Compression	-U: G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC
Audio Bit Rate	-U: 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	-U: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Environment Noise Filtering	-U: Yes
Network	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, 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	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 1.1/1.2/1.3, host authentication (MAC address)
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: IE 10, IE 11, 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)	120 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
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, send email, trigger recording, trigger capture
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection (support alarm triggered by specified target types (human and vehicle)), scene change detection, audio exception detection, defocus detection
Deep Learning Function	
Face Capture	Yes
People Counting	Yes
General	
Power	12 VDC ± 25%, 0.7 A, max. 8.5 W, Ø5.5 mm coaxial power plug, reverse polarity protection, PoE: IEEE 802.3af, Class 3, max. 10 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 Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
General Function	Heartbeat, mirror, flash log password reset via email, pixel counter, anti-banding
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	FCC: 47 CFR Part 15, Subpart B, CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7

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
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.

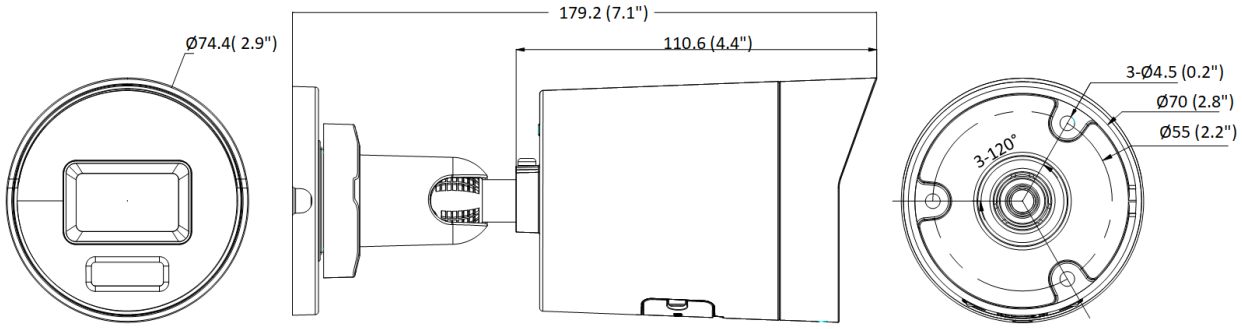
Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped 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-2CD3048G2-LI (2.8/4 mm)

DS-2CD3048G2-LIU (2.8/4 mm)

▪ Dimension

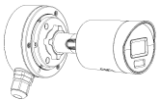


Unit: mm (inch)

▪ Accessory

▪ Optional

CBXS Junction Box



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