

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)



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Specification

Image Sensor1/3" Progressive Scan CMOSMax. Resolution268× 1520Min. IlluminationColor: 0.001 Lux @ (F1.0, AGC ON), 0 Lux with lightShutter Time1/3 s to 1/100,000 sDay & NightR. cut filterAngle AdjustmentNa: 0" to 360", til: 0" to 90", rotate: 0" to 360"LensTypeFixed focal lens, 2.8 and 4 mm optionalEns TypeFixed focal lens, 2.8 and 4 mm optionalFocal Length & FOV2.8 mm, horizontal FOV 10.2", vertical FOV 54.7", diagonal FOV 194.6"Lens MountM12Lens MountM12ApertureFixedApertureFixedApertureFixedDort2.8 mm: 1.9 m to ~ 4 mm: 2.5 m to ~ 4 mm: 2.5 m, Ci 25 m, R: 12 m, I: 6 m 4 mm: 2.5 m to ~DortSame: D: 63 m, 0: 25 m, R: 12 m, I: 6 m 4 mm: 2.5 m, Ci 25 m, R: 12 m, I: 6 m 4 mm: 2.5 mSupplement Light TypeIR, White LightSupplement Light RangeUp to 40 mName RAM: 400 MB, eMMC': 2 GBRumaterSomHerrory:SomOpen CaspabilityHEOP 2.0 OpendevSDKDepen GapabilityHEOP 2.0 OpendevSDKComputing Power0.7 (Ci 4.5 (Si 250, 1520,	Camera	
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Deep Learning Structure Caffe, PyTorch, TensorFlow, PaddlePaddle, ONNX Programming Language C, C++ Video Video Main Stream 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) Sub-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)	Computing Power	1.5 TOPS
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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 × 720, 640 × 480, 640 × 360) 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) Fhird Stream 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)	Programming Language	C, C++
Main Stream 60 Hz: 30 fps (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) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360) Third Stream 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)	Video	
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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)	Main Stream	60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
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Third Stream 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)	Sub-Stream	60 Hz: 30 fps (1280 x 720, 640 × 480, 640 × 360)
		50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)
*The third stream is supported under certain settings.	Third Stream	60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)
		*The third stream is supported under certain settings.
50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)		50 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)
Fourth Stream 60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)	Fourth Stream	60 Hz: 10 fps (1280 × 720, 640 × 480, 640 × 360)
*The fourth stream is supported under certain settings.		*The fourth stream is supported under certain settings.



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	Main stream: H.265/H.264/H.264+/H.265+,
	Sub-stream: H.265/H.264/MJPEG,
Video Compression	Third stream: H.265/H.264,
video compression	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
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	-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	
	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	Open Network Video Interface (Profile S, Profile G, Profile T), ISAPI, SDK, ISUP
User/Host	Up to 32 users
0301/11030	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)
	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
	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance,
Image Settings	adjustable by client software or web browser
Image Settings Day/Night Switch Image Enhancement	adjustable by client software or web browser Day, Night, Auto, Schedule BLC, HLC, 3D DNR



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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.

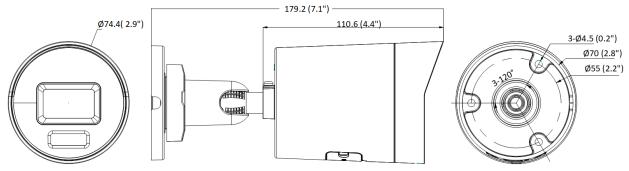
This model has NO SPECIFIC PROTECTION.

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



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