

## DS-2CD2046G2-I(U)

### 4 MP AcuSense Powered-by-DarkFighter Fixed Bullet Network Camera



Empowered by deep learning algorithms, Hikvision AcuSense technology brings human and vehicle targets classification alarms to front- and back-end devices. The system focuses on human and vehicle targets, vastly improving alarm efficiency and effectiveness.

- High quality imaging with 4 MP resolution
- Excellent low-light performance with powered-by-DarkFighter technology
- Clear imaging against strong backlight due to 120 dB true WDR technology
- Efficient H.265+ compression technology
- Focus on human and vehicle targets classification based on deep learning
- Built-in microphone for real-time auto security(-U)
- Water and dust resistant (IP67)



## ▪ Specification

Camera	
Image Sensor	1/3" Progressive Scan CMOS
Min. Illumination	Color: 0.003 Lux @ (F1.4, AGC ON), B/W: 0 Lux with IR
Shutter Speed	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°
Slow Shutter	Yes
P/N	P/N
Wide Dynamic Range	120 dB
Lens	
Lens Type	Fixed focal lens, 2.8, 4, and 6 mm optional
Focal Length & FOV	2.8 mm, horizontal FOV 103°, vertical FOV 55°, diagonal FOV 123° 4 mm, horizontal FOV 83°, vertical FOV 45°, diagonal FOV 98° 6 mm, horizontal FOV 53°, vertical FOV 28°, diagonal FOV 62°
Aperture	F1.4
Lens Mount	M12
Iris Type	Fixed
DORI	
DORI	2.8 mm: D: 60.0 m, O: 23.8 m, R: 12.0 m, I: 6.0 m 4 mm: D: 80.0 m, O: 31.7 m, R: 16.0 m, I: 8.0 m 6 mm: D: 120.0 m, O: 47.6 m, R: 24.0 m, I: 12.0
Illuminator	
IR Range	Up to 40 m
IR Wavelength	850 nm
Smart Supplement Light	Yes
Supplement Light Type	IR
Video	
Max. Resolution	2688 × 1520
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 (640 × 480, 640 × 360) 60 Hz: 30 fps (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.
Video Compression	Main stream: H.265/H.264/H.265+/H.264+ Sub-stream: H.265/H.264/MJPEG 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
H.264+	Main stream supports
H.265+	Main stream supports

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
<b>Audio</b>	
Environment Noise Filtering	-U: Yes
Audio Sampling Rate	-U: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
Audio Compression	-U: G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC
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)
<b>Network</b>	
Simultaneous Live View	Up to 6 channels
API	Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK
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, SNMP, ARP, WebSocket, WebSockets
User/Host	Up to 32 users. 3 user levels: administrator, operator and user
Security	Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2, WSSE and digest authentication for Open Network Video Interface
Network Storage	MicroSD/SDHC/SDXC card (256 GB) local storage, and 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+ Plug-in free live view: Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0+, Firefox 52.0+
<b>Image</b>	
SNR	≥ 52 dB
Day/Night Switch	Day, Night, Auto, Schedule
Image Enhancement	BLC, HLC, 3D DNR
Image Parameters Switch	Yes
Image Settings	Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser
<b>Interface</b>	
Built-in Microphone	-U: Yes
On-Board Storage	Built-in micro SD/SDHC/SDXC slot, up to 256 GB
Reset Key	Yes
Ethernet Interface	1 RJ45 10 M/100 M self-adaptive Ethernet port
<b>Event</b>	
Basic Event	Motion detection (human and vehicle targets classification), video tampering alarm, exception
Smart Event	Scene change detection
<b>Deep Learning Function</b>	
Face Capture	Yes

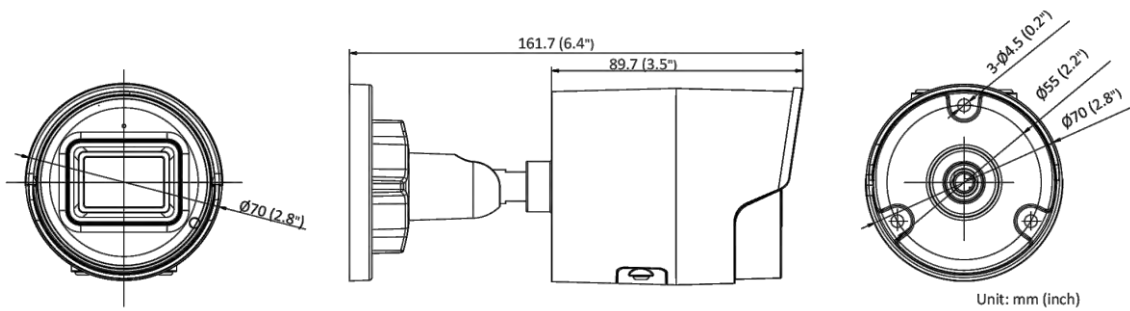
Perimeter Protection	Line crossing detection, intrusion detection, region entrance detection, region exiting detection
<b>General</b>	
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Startup and Operating Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)
Power Supply	12 VDC ± 25%, reverse polarity protection PoE: 802.3af, Class 3
Power Consumption and Current	12 VDC, 0.5 A, max. 6.0 W PoE (802.3af, 36 V to 57 V), 0.2 A to 0.13 A, max. 7.0 W
Power Interface	Ø5.5 mm coaxial power plug
Material	ADC12
Dimension	Ø70 mm × 161.7 mm (Ø2.8" × 6.4")
Package Dimension	216 mm × 121 mm × 118 mm (8.5" × 4.8" × 4.6")
Weight	Approx. 485 g (1.1 lb.)
With Package Weight	Approx. 724 g (1.6 lb.)
Linkage Method	Upload to NAS/memory card/FTP, notify surveillance center, trigger recording, trigger capture, send email
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
General Function	Anti-flicker, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter
Software Reset	Yes
Firmware Version	V5.5.112
<b>Approval</b>	
EMC	FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 + A1: 2014); RCM (AS/NZS CISPR 32: 2015); KC (KN 32: 2015, KN 35: 2015)
Safety	UL (UL 60950-1); CB (IEC 60950-1: 2005 + Am 1: 2009 + Am 2: 2013); CE-LVD (EN 60950-1: 2005 + Am 1: 2009 + Am 2: 2013); 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)

### ▪ Available Model

DS-2CD2046G2-IU (2.8/4/6 mm)

DS-2CD2046G2-I (2.8/4/6 mm)

## Dimension



Unit: mm (inch)

## Accessory

## Optional

### DS-1280ZJ-XS

### Junction Box



Distributed by



# HIKVISION

### Headquarters

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T +86-571-8807-5998  
overseasbusiness@hikvision.com

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Australia**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Canada**  
T +1-866-200-6690  
sales.canada@hikvision.com

**Hikvision Thailand**  
T +662-275-9949  
sales.thailand@hikvision.com

**Hikvision Europe**  
T +31-23-5542770  
sales.eu@hikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Turkey**  
T +90 [216]521 7070- 7074  
sales.tr@hikvision.com

**Hikvision Malaysia**  
T +601-7652-2413  
sales.my@hikvision.com

**Hikvision UK & Ireland**  
T +01628-902140  
sales.uk@hikvision.com

**Hikvision South Africa**  
Tel: +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Kazakhstan**  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

**Hikvision Vietnam**  
T +84-974270888  
sales.vt@hikvision.com

**Hikvision UAE**  
T +971-4-4432090  
salesme@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Tashkent**  
T +99-87-1238-9438  
uzb@hikvision.ru

**Hikvision Hong Kong**  
T +852-2151-1761  
info.hk@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision Korea**  
T +82-(0)31-731-8817  
sales.korea@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
info.pl@hikvision.com

**Hikvision Indonesia**  
T +62-21-2933759  
Sales.Indonesia@hikvision.com

**Hikvision Colombia**  
sales.colombia@hikvision.com