# DS-2CD2086G2-I(U)

## 8 MP AcuSense Powered-by-Darkfighter Fixed Mini 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 8 MP resolution
- Excellent low-light performance via powered-by-DarkFighter technology
- Efficient H.265+ compression technology
- Clear imaging against strong back light due to 120 dB true WDR technology
- Focus on human and vehicle targets classification based on deep learning
- Built-in microphone for real-time audio security(-U)
- Water and dust resistant (IP67)

## ▪ Specification

| | |
|---|---|
| **Camera** | |
| Image Sensor | 1/1.8" Progressive Scan CMOS |
| Min. Illumination | Color: 0.003 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR |
| Shutter Speed | 1/3 s to 1/100,000 s |
| Slow Shutter | Yes |
| P/N | P/N |
| Wide Dynamic Range | 120 dB |
| Day & Night | IR cut filter |
| Angle Adjustment | Pan: 0 to 360°, tilt: 0 to 90°, rotation: 0 to 360° |
| **Lens** | |
| Lens Type | Fixed focal lens, 2.8, 4, and 6 mm optional |
| Iris Type | Fixed |
| Focal Length & FOV | 2.8 mm, horizontal FOV 111°, vertical FOV 59°, diagonal FOV 131°<br>4 mm, horizontal FOV 87°, vertical FOV 47°, diagonal FOV 102°<br>6 mm, horizontal FOV 51°, vertical FOV 28°, diagonal FOV 60° |
| Aperture | F1.6 |
| Lens Mount | M12 |
| **DORI** | |
| DORI | 2.8 mm: D: 89.2 m, O: 35.4 m, R: 17.8 m, I: 8.9 m<br>4 mm: D: 99.4 m, O: 39.4 m, R: 19.9 m, I: 9.9 m<br>6 mm: D: 140.0 m, O: 55.6 m, R: 28.0 m, I: 14.0 m |
| **Illuminator** | |
| Supplement Light Type | IR |
| IR Range | Up to 40 m |
| IR Wavelength | 850 nm |
| Smart Supplement Light | Yes |
| **Video** | |
| Max. Resolution | 3840 × 2160 |
| Main Stream | 50 Hz: 25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)<br>60 Hz: 24 fps (3840 × 2160)<br>30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720) |
| Sub-Stream | 50 Hz: 25 fps (1280 × 720, 640 × 480, 640 × 360)<br>60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360) |
| Third Stream | 50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)<br>60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)<br>*Third stream is supported under certain settings. |
| Video Compression | Main stream: H.265/H.264/H.264+/H.265+<br>Sub-stream: H.265/H.264/MJPEG<br>Third stream: H.265/H.264<br>*Third stream is supported under certain settings. |
| Video Bit Rate | 32 Kbps to 16 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 |
| **Audio** | |
| 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-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 Type | -U: Mono sound |
| **Network** | |
| 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 | NAS (NFS, SMB/CIFS), auto network replenishment (ANR)<br>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<br>Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+<br>Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+ |
| **Image** | |
| Day/Night Switch | Day, Night, Auto, Schedule |
| Target Cropping | Yes |
| 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 |
| SNR | ≥ 52 dB |
| **Interface** | |
| Built-in Microphone | -U: Yes |
| On-Board Storage | Built-in micro SD, up to 512 GB |
| Hardware Reset | Yes |
| Ethernet Interface | 1 RJ45 10 M/100 M self-adaptive Ethernet port |
| **Event** | |
| Basic Event | Motion detection (human and vehicle targets classification), video tampering alarm, exception |

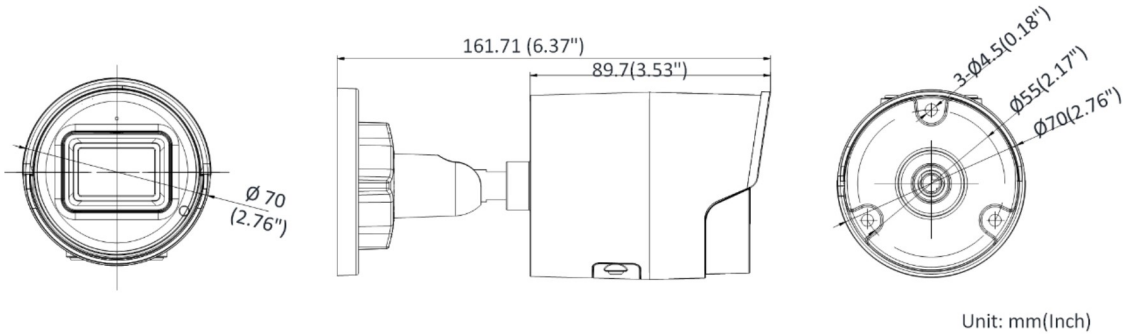
| | |
|---|---|
| Smart Event | Scene change detection |
| **Deep Learning Function** | |
| Face Capture | Yes |
| Perimeter Protection | Line crossing detection, intrusion detection, region entrance detection, region exiting detection<br>Supports human and vehicle targets classification |
| **General** | |
| Web Client Language | 33 languages<br>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 |
| Linkage Method | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture |
| 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%<br>PoE: 802.3af, Class 3 |
| Power Consumption and Current | 12 VDC, 0.5 A, max. 6 W<br>PoE (802.3af, 36V to 57V), 0.2 A to 0.13 A, max. 7.2 W |
| Power Interface | Ø5.5 mm coaxial power plug |
| Camera Material | Metal |
| Camera Dimension | Ø70 mm ×161.7 mm (Ø2.8" × 6.37") |
| Package Dimension | 216 mm × 121 × 118 mm (8.5" × 4.8" ×4.6") |
| Camera Weight | Approx. 485 g (1.1 lb.) |
| With Package Weight | Approx. 749 g (1.6 lb.) |
| Firmware Version | V5.5.112 |
| **Approval** | |
| Protection | IP67 (IEC 60529-2013) |
| EMC | 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) |
| Environment | CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006) |

## ▪ Available Model

DS-2CD2086G2-IU (2.8/4/6 mm)

DS-2CD2086G2-I (2.8/4/6 mm)

## ▪ Dimension




Unit: mm(Inch)

## ▪ Accessory

### ▪ Optional

| DS-1280ZJ-XS<br>Junction Box |
| --- |
|  |

Distributed by


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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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


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050511220230217