

**DS-2CD2083G2-I(U)**

**8 MP AcuSense Fixed Bullet Network Camera**

AcuSense



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
- Efficient H.265+ compression technology
- Clear imaging against strong backlight due to 120 dB WDR technology
- Focusing 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           | 1/2.8" Progressive Scan CMOS                                                                                                                                                                      |
| Min. Illumination      | Color: 0.005 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°, rotate: 0° to 360°                                                                                                                                              |
| Lens                   |                                                                                                                                                                                                   |
| Lens Type              | Fixed focal lens, 2.8, 4, and 6 mm optional                                                                                                                                                       |
| Focal Length & FOV     | 2.8 mm, horizontal FOV 107°, vertical FOV 57°, diagonal FOV 128°<br>4 mm, horizontal FOV 87°, vertical FOV 46°, diagonal FOV 105°<br>6 mm, horizontal FOV 54°, vertical FOV 29°, diagonal FOV 63° |
| Lens Mount             | M12                                                                                                                                                                                               |
| Iris Type              | Fixed                                                                                                                                                                                             |
| Aperture               | F1.6                                                                                                                                                                                              |
| DORI                   |                                                                                                                                                                                                   |
| DORI                   | 2.8 mm: D: 88 m, O: 35 m, R: 17 m, I: 9 m<br>4 mm: D: 108 m, O: 43 m, R: 22 m, I: 11 m<br>6 mm: D: 177 m, O: 70 m, R: 35 m, I: 18 m                                                               |
| Illuminator            |                                                                                                                                                                                                   |
| Supplement Light Type  | IR                                                                                                                                                                                                |
| Smart Supplement Light | Yes                                                                                                                                                                                               |
| IR Wavelength          | 850 nm                                                                                                                                                                                            |
| IR Range               | Up to 40 m                                                                                                                                                                                        |
| Video                  |                                                                                                                                                                                                   |
| Max. Resolution        | 3840 × 2160                                                                                                                                                                                       |
| Main Stream            | 50 Hz: 20 fps (3840 × 2160)<br>25 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)<br>60 Hz: 20 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                                                                                                                                                                                    |
| <b>Audio</b>                |                                                                                                                                                                                                                                  |
| 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)/16-64 Kbps (AAC-LC)/32-192 Kbps (MP2L2)/8-320 Kbps (MP3)                                                                                                     |
| Audio Sampling Rate         | -U: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz                                                                                                                                                                                          |
| Environment Noise Filtering | -U: Yes                                                                                                                                                                                                                          |
| <b>Network</b>              |                                                                                                                                                                                                                                  |
| 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, WebSocket, WebSockets                                                            |
| Simultaneous Live View      | Up to 6 channels                                                                                                                                                                                                                 |
| API                         | Open Network Video Interface (Profile S, Profile G), ISAPI, SDK                                                                                                                                                                  |
| 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)                                                                                                                                                                            |
| 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+<br>Local service: Chrome 57.0+, Firefox 52.0+                                                                                   |
| <b>Image</b>                |                                                                                                                                                                                                                                  |
| Image Parameters Switch     | Yes                                                                                                                                                                                                                              |
| Image Settings              | Rotate, mirror, privacy mask, 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                                                                                                                                                                                                                          |
| <b>Interface</b>            |                                                                                                                                                                                                                                  |
| Ethernet Interface          | 1 RJ45 10 M/100 M self-adaptive Ethernet port                                                                                                                                                                                    |
| On-Board Storage            | Built-in memory card slot, support microSD card, up to 512 GB                                                                                                                                                                    |
| Built-in Microphone         | -U: Yes                                                                                                                                                                                                                          |
| Reset Key                   | Yes                                                                                                                                                                                                                              |
| <b>Event</b>                |                                                                                                                                                                                                                                  |
| Basic Event                 | Motion detection (human and vehicle targets classification), video tampering alarm, exception                                                                                                                                    |
| Face Detection              | Yes                                                                                                                                                                                                                              |

| Deep Learning Function           |                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perimeter Protection             | Line crossing detection, intrusion detection<br>Supports human and vehicle targets classification                                                                                                                                                                                                                                                       |
| General                          |                                                                                                                                                                                                                                                                                                                                                         |
| Linkage Method                   | Upload to FTP/memory card/NAS, notify surveillance center, trigger recording, trigger capture, send email                                                                                                                                                                                                                                               |
| Material                         | Aluminum alloy body<br>IR cover: plastic                                                                                                                                                                                                                                                                                                                |
| Dimension                        | Ø70 mm × 161.7 mm (Ø2.8" × 6.4")                                                                                                                                                                                                                                                                                                                        |
| Package Dimension                | 216 mm × 121 mm × 118 mm (8.6" × 4.8" × 4.7")                                                                                                                                                                                                                                                                                                           |
| Weight                           | Approx. 495 g (1.1 lb.)                                                                                                                                                                                                                                                                                                                                 |
| With Package Weight              | Approx. 759 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)                                                                                                                                                                                                                                                                               |
| 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, password reset via email, pixel counter                                                                                                                                                                                                                                                                                        |
| Firmware Version                 | V5.5.113                                                                                                                                                                                                                                                                                                                                                |
| Software Reset                   | Yes                                                                                                                                                                                                                                                                                                                                                     |
| Power Consumption and Current    | 12 VDC, 0.5 A, max. 6 W<br>PoE (802.3af, 36 V to 57 V), 0.2 A to 0.13 A, max. 7.2 W                                                                                                                                                                                                                                                                     |
| Power Supply                     | 12 VDC ± 25%, reverse polarity protection<br>PoE: 802.3af, Class 3                                                                                                                                                                                                                                                                                      |
| Power Interface                  | Ø5.5 mm coaxial power plug                                                                                                                                                                                                                                                                                                                              |
| Approval                         |                                                                                                                                                                                                                                                                                                                                                         |
| 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); IC (ICES-003: Issue 6, 2016); 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); BIS (IS 13252(Part 1):2010+A1:2013+A2:2015)                                                                                                                                                                                           |
| Environment                      | CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)                                                                                                                                                                                                                                                                           |
| Protection                       | IP67 (IEC 60529-2013)                                                                                                                                                                                                                                                                                                                                   |

## ▪ Available Model

DS-2CD2083G2-I (2.8/4/6 mm)

DS-2CD2083G2-IU (2.8/4/6 mm)

DS-2CD2083G2-IU (2.8 mm) (Black)

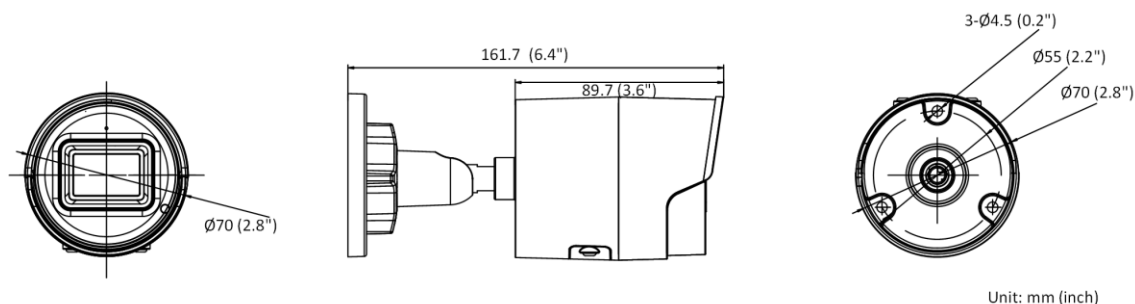
## ▪ Typical Application

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.                                                                                                                                  |

## Dimension



## Accessory

### Optional

| DS-1280ZJ-XS<br>Junction Box                                                       | DS-1280ZJ-XS (Black)<br>Junction Box                                                |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |

Distributed by

# HIKVISION®

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