

## DS-2CD2186G2H-I(SU)

### 8 MP Powered by Darkfighter Fixed Dome Network Camera

AcuSense

Powered by

**DarkFighter**



- Excellent low-light performance via powered-by-DarkFighter technology
- High quality imaging with 8 MP resolution
- Clear imaging against strong back light due to 130 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) and vandal-resistant (IK10)

## ▪ Specification

| Camera                      |                                                                                                                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor                | 1/1.8" Progressive Scan CMOS                                                                                                                                                         |
| Max. Resolution             | 3840 × 2160                                                                                                                                                                          |
| Min. Illumination           | Color: 0.0008 Lux @ (F1.0, AGC ON), B/W: 0 Lux with IR                                                                                                                               |
| Shutter Time                | 1/3 s to 1/100,000 s                                                                                                                                                                 |
| Day & Night                 | IR cut filter                                                                                                                                                                        |
| Angle Adjustment            | Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°                                                                                                                                 |
| Lens                        |                                                                                                                                                                                      |
| Lens Type                   | Fixed focal lens, 2.8 and 4 mm optional                                                                                                                                              |
| Focal Length & FOV          | 2.8 mm, horizontal FOV 105.1°, vertical FOV 54.8°, diagonal FOV 128.2°<br>4 mm, horizontal FOV 90.0°, vertical FOV 45.8°, diagonal FOV 109.4°                                        |
| Lens Mount                  | M16                                                                                                                                                                                  |
| Iris Type                   | Fixed                                                                                                                                                                                |
| Aperture                    | F1.0                                                                                                                                                                                 |
| Depth of Field              | 2.8 mm: 3.3 m to ∞<br>4 mm: 3.8 m to ∞                                                                                                                                               |
| DORI                        |                                                                                                                                                                                      |
| DORI                        | 2.8 mm: D: 89 m, O: 35 m, R: 17 m, I: 8 m<br>4 mm: D: 109 m, O: 43 m, R: 21 m, I: 10 m                                                                                               |
| Illuminator                 |                                                                                                                                                                                      |
| Supplement Light Type       | IR                                                                                                                                                                                   |
| Supplement Light Range      | Up to 30 m                                                                                                                                                                           |
| Smart Supplement Light      | Yes                                                                                                                                                                                  |
| IR Wavelength               | 850 nm                                                                                                                                                                               |
| Video                       |                                                                                                                                                                                      |
| Main Stream                 | 50 Hz:<br>25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)<br>60 Hz:<br>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                                                                                                                                                                         |
| 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                       |                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Audio Compression           | -U: G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC                                                                                                                                                                                                                                                                                                                                          |
| Audio Type                  | -U: Mono sound                                                                                                                                                                                                                                                                                                                                                                        |
| Audio Bit Rate              | -U: 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/16 Kbps to 64 Kbps (AAC-LC)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)                                                                                                                                                                                                                                            |
| 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, RTCP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, WebSocket, WebSockets, SRTP, SFTP                                                                                                                                                                                               |
| 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<br>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,<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                       |                                                                                                                                                                                                                                                                                                                                                                                       |
| 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)    | 130 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                                                                                                                                                                                                                                                                                                                                                                               |
| Audio                       | -S: 1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium, 1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium                                                                                                       |
| Alarm                       | -S: 1 input, 1 output (max. 12 VDC, 30 mA)                                                                                                                                                                                                                                                                                                                                            |
| 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, trigger recording, trigger capture, send email                                                                                                                                                                                                                                             |
| Smart Event                      | Scene change detection                                                                                                                                                                                                                                                                                                                                |
| Deep Learning Function           |                                                                                                                                                                                                                                                                                                                                                       |
| Face Capture                     | Yes                                                                                                                                                                                                                                                                                                                                                   |
| Perimeter Protection             | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggered by specified target types (human and vehicle)                                                                                                                                                                                                                    |
| General                          |                                                                                                                                                                                                                                                                                                                                                       |
| Power                            | 12 VDC $\pm$ 25%, 0.66 A, max. 8 W, $\varnothing$ 5.5 mm coaxial power plug, reverse polarity protection,<br>PoE: IEEE 802.3af, Class 3, max. 9.5 W                                                                                                                                                                                                   |
| Material                         | Base: aluminum alloy, cover: aluminum alloy                                                                                                                                                                                                                                                                                                           |
| Dimension                        | $\varnothing$ 121.5 mm $\times$ 97.6 mm ( $\varnothing$ 4.78" $\times$ 3.84")                                                                                                                                                                                                                                                                         |
| Package Dimension                | 234 mm $\times$ 120 mm $\times$ 117 mm (9.2" $\times$ 4.7" $\times$ 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, 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                              | CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014                                                                                                                                                                                                                                                     |
| Safety                           | CB: IEC 62368-1: 2014+A11,<br>CE-LVD: EN 62368-1: 2014/A11: 2017                                                                                                                                                                                                                                                                                      |
| Environment                      | CE-RoHS: 2011/65/EU,<br>WEEE: 2012/19/EU,<br>Reach: Regulation (EC) No 1907/2006                                                                                                                                                                                                                                                                      |
| Protection                       | IP67: IEC 60529-2013, IK10: IEC 62262:2002                                                                                                                                                                                                                                                                                                            |

## ▪ 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.

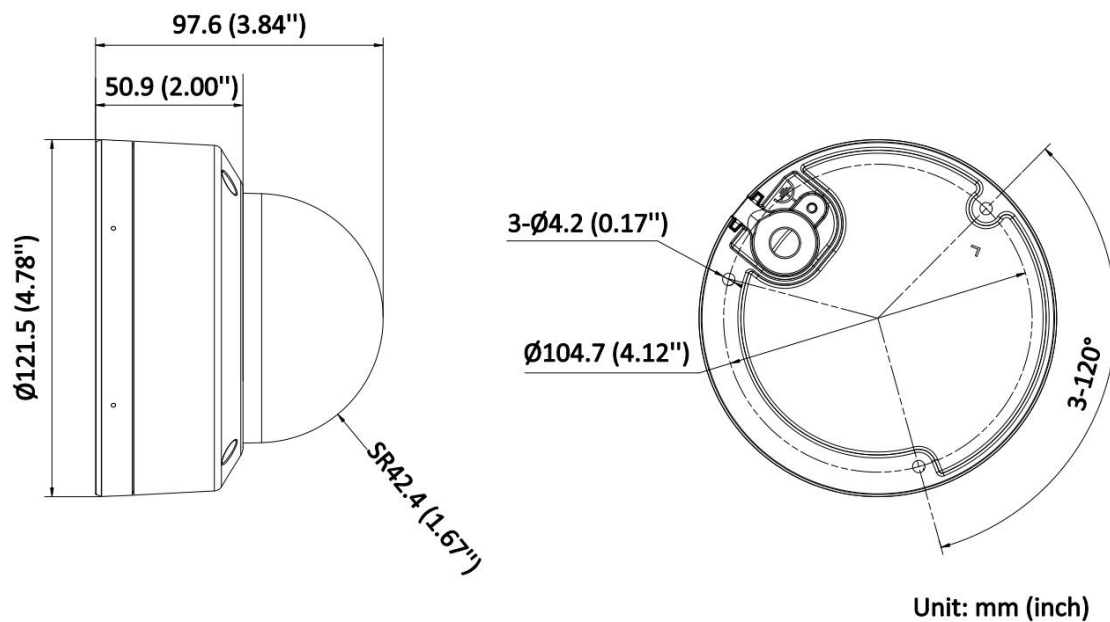
| Level                  | Description                                                                                                                                                                                                                                            |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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-2CD2186G2H-I (2.8/4 mm)

DS-2CD2186G2H-ISU (2.8/4 mm)

## ▪ Dimension



## ▪ Accessory

### ▪ Optional

| DS-2210ZJ-WA-120<br>Pendant Mount                                                 | DS-1275ZJ-SUS<br>Vertical Pole Mount                                              | DS-1276ZJ-SUS<br>Corner Mount                                                     | DS-2280ZJ-WA120<br>Junction Box                                                    | DS-1280ZJ-DM46<br>Junction Box                                                      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| DS-1272ZJ-120<br>Wall Mount                                                       | DS-1272ZJ-120B<br>Wall Mount                                                      | DS-1271ZJ-120<br>Pendant Mount                                                    | DS-2200ZJ-WAJ-120<br>Wall Mount                                                    | DS-2200ZJ-WA-120<br>Wall Mount                                                      |
|  |  |  |  |  |

#### Headquarters

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



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