

## DS-2CD2147G2-SU 4 MP ColorVu Fixed Dome Network Camera

ColorVu



Hikvision ColorVu technology provides 24/7 vivid colorful images with  $f/1.0$  advanced lenses and high performance sensors. The  $f/1.0$  super-aperture collects more light to produce brighter images. Advanced sensor technology can vastly improve the use of available light.

### Available Models

DS-2CD2147G2-SU: 2.8 mm

DS-2CD2147G2-SU: 4 mm

- High-Quality Image with 4 MP Resolution
- Efficient H.265+ Compression Technology
- Clear Imaging Against Strong Backlight with 130 dB WDR Technology
- 24/7 Colorful Imaging
- Focus on Human and Vehicle Classification Based on Deep Learning
- Built-in Microphone for Real-Time Audio Security
- Audio and Alarm Interface Available
- Water and Dust Resistant (IP67)
- Vandal Resistant (IK10)



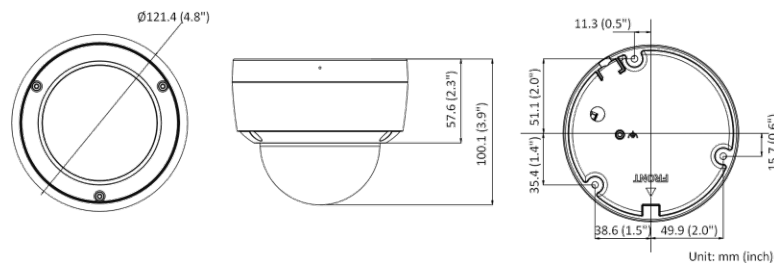
# Specifications

| DS-2CD2147G2-SU             |                                                                                                                                                                                                                                  |                                                                                                                     |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Camera</b>               |                                                                                                                                                                                                                                  |                                                                                                                     |
| Image Sensor                | 1/1.8" progressive scan CMOS                                                                                                                                                                                                     |                                                                                                                     |
| Shutter Speed               | 1/3 s to 1/100,000 s                                                                                                                                                                                                             |                                                                                                                     |
| Minimum Illumination        | 0.0005 lux @ (f/1.0, AGC on)                                                                                                                                                                                                     |                                                                                                                     |
| Slow Shutter                | Yes                                                                                                                                                                                                                              |                                                                                                                     |
| P/N                         | P/N                                                                                                                                                                                                                              |                                                                                                                     |
| Wide Dynamic Range          | 130 dB                                                                                                                                                                                                                           |                                                                                                                     |
| Angle Adjustment            | Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°                                                                                                                                                                             |                                                                                                                     |
| <b>Lens</b>                 |                                                                                                                                                                                                                                  |                                                                                                                     |
| Lens Type                   | 2.8 mm or 4 mm                                                                                                                                                                                                                   |                                                                                                                     |
| Focal Length and FOV        | 2.8 mm                                                                                                                                                                                                                           | Horizontal FOV 106°, vertical FOV 61°, diagonal FOV 127°                                                            |
|                             | 4 mm                                                                                                                                                                                                                             | Horizontal FOV 95°, vertical FOV 51°, diagonal FOV 115°                                                             |
| Lens Mount                  | M16                                                                                                                                                                                                                              |                                                                                                                     |
| Aperture                    | f/1.0                                                                                                                                                                                                                            |                                                                                                                     |
| Blue Glass Module           | Blue glass module to reduce ghost phenomenon                                                                                                                                                                                     |                                                                                                                     |
| Working Distance            | 2.8 mm                                                                                                                                                                                                                           | 2.5 m to ∞                                                                                                          |
|                             | 4 mm                                                                                                                                                                                                                             | 3.5 m to ∞                                                                                                          |
| <b>DORI</b>                 |                                                                                                                                                                                                                                  |                                                                                                                     |
| DORI                        | 2.8 mm                                                                                                                                                                                                                           | D: 62 m, O: 24 m, R: 12 m, I: 6 m                                                                                   |
|                             | 4 mm                                                                                                                                                                                                                             | D: 77 m, O: 30 m, R: 15 m, I: 7 m                                                                                   |
| <b>Video</b>                |                                                                                                                                                                                                                                  |                                                                                                                     |
| Maximum Resolution          | 2688 × 1520                                                                                                                                                                                                                      |                                                                                                                     |
| Main Stream                 | 60 Hz: 30 fps (2688 × 1520, 2304 × 1296, 1920 × 1080, 1280 × 720)                                                                                                                                                                |                                                                                                                     |
| Sub Stream                  | 60 Hz: 30 fps (640 × 480, 640 × 360, 320 × 240)                                                                                                                                                                                  |                                                                                                                     |
| Third Stream                | 60 Hz: 30 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)                                                                                                                                                                      |                                                                                                                     |
| Video Compression           | Main Stream                                                                                                                                                                                                                      | H.265/H.264/H.264+/H.265+                                                                                           |
|                             | Sub-Stream                                                                                                                                                                                                                       | H.265/H.264/MJPEG                                                                                                   |
|                             | Third Stream                                                                                                                                                                                                                     | H.265/H.264                                                                                                         |
| 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) | Yes                                                                                                                                                                                                                              |                                                                                                                     |
| Region of Interest (ROI)    | 1 fixed region for main stream and sub-stream                                                                                                                                                                                    |                                                                                                                     |
| <b>Audio</b>                |                                                                                                                                                                                                                                  |                                                                                                                     |
| Environment Noise Filtering | Yes                                                                                                                                                                                                                              |                                                                                                                     |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz                                                                                                                                                                                              |                                                                                                                     |
| Audio Compression           | G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC                                                                                                                                                                              |                                                                                                                     |
| Audio Bit Rate              | 64 Kbps (G.711 ulaw)/64 Kbps (G.711 alaw)/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 Views     | Up to 6 channels                                                                                                                                                                                                                 |                                                                                                                     |
| API                         | Open Network Video Interface (Profile S, Profile G), ISAPI, SDK                                                                                                                                                                  |                                                                                                                     |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1x, QoS, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP                                                                                         |                                                                                                                     |
| 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 (256 GB) local storage, NAS (NFS, SMB/CIFS), auto network replenishment (ANR)                                                                                                                                  |                                                                                                                     |
| Client                      | iVMS-4200, Hik-Connect, HikCentral                                                                                                                                                                                               |                                                                                                                     |
| Web Browser                 | Plug-in required live view: IE 10, IE 11<br>Plug-in free live view: Chrome 57.0+, Firefox 52.0+, local service: Chrome 57.0+, Firefox 52.0+                                                                                      |                                                                                                                     |
| <b>Image</b>                |                                                                                                                                                                                                                                  |                                                                                                                     |
| Day/Night Switch            | Day, Night, Auto, Schedule                                                                                                                                                                                                       |                                                                                                                     |
| Image Enhancement           | BLC, HLC, 3D DNR                                                                                                                                                                                                                 |                                                                                                                     |
| Image Parameters Switch     | Yes                                                                                                                                                                                                                              |                                                                                                                     |
| Image Settings              | Rotate, mirror, privacy mask, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or Web browser                                                                                      |                                                                                                                     |
| <b>Interface</b>            |                                                                                                                                                                                                                                  |                                                                                                                     |
| Ethernet Interface          | 1 RJ-45 10M/100M self-adaptive Ethernet port                                                                                                                                                                                     |                                                                                                                     |
| On-Board Storage            | Built-in memory card slot, supports microSD/SDHC/SDXC/TF card, up to 256 GB                                                                                                                                                      |                                                                                                                     |
| Built-in Microphone         | Yes                                                                                                                                                                                                                              |                                                                                                                     |
| Audio                       | Input                                                                                                                                                                                                                            | 1 line in, maximum input amplitude: 3.3 vpp, input impedance: 4.7K Ω, interface type: non-equilibrium               |
|                             | Output                                                                                                                                                                                                                           | 1 line out, maximum output amplitude: 3.3 vpp, output impedance: 100 Ω, interface type: non-equilibrium, mono sound |
| Alarm                       | 1 input, 1 output (TTL: maximum 12 VDC, 30 mA)                                                                                                                                                                                   |                                                                                                                     |
| Hardware Reset              | Yes                                                                                                                                                                                                                              |                                                                                                                     |

## Specifications (continued)

| DS-2CD2147G2-SU                  |                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Event</b>                     |                                                                                                                                                                                                                                                                                                                                                       |
| Basic Event                      | Motion detection (human and vehicle), video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error) Alarm input and output                                                                                                                                                                         |
| Smart Event                      | Scene change detection                                                                                                                                                                                                                                                                                                                                |
| <b>Deep Learning Function</b>    |                                                                                                                                                                                                                                                                                                                                                       |
| Face Capture                     | Yes                                                                                                                                                                                                                                                                                                                                                   |
| Premier Protection               | Line crossing detection, intrusion detection, region entrance detection, region exiting detection                                                                                                                                                                                                                                                     |
| <b>General</b>                   |                                                                                                                                                                                                                                                                                                                                                       |
| Power                            | 12 VDC $\pm$ 25%<br>PoE: 802.3af, Class 3                                                                                                                                                                                                                                                                                                             |
| Camera Material                  | Metal                                                                                                                                                                                                                                                                                                                                                 |
| Camera Dimensions                | $\varnothing$ 121.4 mm $\times$ 100.1 mm ( $\varnothing$ 4.8" $\times$ 3.9")                                                                                                                                                                                                                                                                          |
| Package Dimensions               | 150 mm $\times$ 150 mm $\times$ 141 mm (5.9" $\times$ 5.9" $\times$ 5.6")                                                                                                                                                                                                                                                                             |
| Camera Weight                    | Approximately 570 g (1.3 lb)                                                                                                                                                                                                                                                                                                                          |
| With Package Weight              | Approximately 820 g (1.8 lb)                                                                                                                                                                                                                                                                                                                          |
| Storage Conditions               | -30° to 60° C (-22° to 140° F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                                 |
| Startup and Operating Conditions | -30° to 60° C (-22° to 140° F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                                 |
| Linkage Method                   | Upload to FTP/memory card/NAS, notify surveillance center, trigger record, trigger capture, send e-mail                                                                                                                                                                                                                                               |
| Power Consumption and Current    | 12 VDC, 0.4 A, maximum 5 W<br>PoE (802.3af, 36 V to 57 V), 0.20 A to 0.15 A, maximum 6.5 W                                                                                                                                                                                                                                                            |
| Power Interface                  | $\varnothing$ 5.5 mm coaxial power plug                                                                                                                                                                                                                                                                                                               |
| Web Client 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, password reset via e-mail, pixel counter                                                                                                                                                                                                                                                                                     |
| Software Reset                   | Yes                                                                                                                                                                                                                                                                                                                                                   |
| <b>Approval</b>                  |                                                                                                                                                                                                                                                                                                                                                       |
| Class                            | Class B                                                                                                                                                                                                                                                                                                                                               |
| EMC                              | FCC SDoC (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 VoC (ICES-003: Issue 6, 2016)                                                                                                                                                      |
| Safety                           | UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014)                                                                                                                                                                                                  |
| Environment                      | CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)                                                                                                                                                                                                                                                                         |
| Protection                       | IP67 (IEC 60529-2013), IK10 (IEC 62262:2002)                                                                                                                                                                                                                                                                                                          |

## Dimensions



## Accessories

| NOT INCLUDED             |                                        |                             |                           |                         |                              |                              |
|--------------------------|----------------------------------------|-----------------------------|---------------------------|-------------------------|------------------------------|------------------------------|
|                          |                                        |                             |                           |                         |                              |                              |
| <b>WMS</b><br>Wall Mount | <b>CPM</b><br>Ceiling<br>Pendent Mount | <b>PC120</b><br>Pendent Cap | <b>CM</b><br>Corner Mount | <b>PM</b><br>Pole Mount | <b>SRS</b><br>Sun/Rain Shade | <b>CB120</b><br>Conduit Base |