

## DS-2CD51C5G0-IZS

### 12 MP IR Varifocal Dome Network Camera



- 1/1.7" Progressive Scan CMOS
- 4000 × 3000 @ 20fps
- MJPEG up to 1920 × 1080 @ 30fps
- 2.8 to 12 mm motorized lens
- Color: 0.008 Lux @ (F1.2, AGC ON), 0 Lux with IR
- H.265, H.265+, H.264, H.264+
- Digital WDR
- IR range: up to 30 m
- Alarm 1 input/1 output, audio 1 input/1 output, 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
- IK10
- 5 streams and up to 5 custom streams
- 6 behavior analyses, 3 exception detection, and face detection
- Built-in microSD/SDHC/SDXC card slot, up to 256 GB
- Metadata of intrusion detection, line crossing detection, region entrance detection, region exiting detection, unattended baggage detection, and object removal are supported.





## Function

### Smooth Streaming

Smooth streaming offers solutions to improve the video quality in different network conditions. For example, in poor network conditions, adapting to the detected real-time network condition, streaming bit rate and resolution are automatically adjusted to avoid mosaic and lower latency in live view; in multiplayer network conditions, the camera transmits the redundant data for the self-error correcting in back-end device, so that to solve the mosaic problem because of the packet loss and error rate.

### Metadata

Metadata uses individual instances of application data or the data content. Metadata can be used for third-party application development.

### Power Protection

The camera supports a wide voltage range of 10 VDC to 48 VDC. If the voltage instability occurs, the camera still works properly. The camera supports reverse polarity protection which can avoid the camera malfunction caused by false operation.

## Specifications

| Camera            |   |
|-------------------|---|
| Image Sensor      | 1/1.7" Progressive Scan CMOS  |
| Min. Illumination | Color: 0.008 Lux @ (F1.2, AGC ON), 0 Lux with IR  |
| Shutter Speed     | 1 s to 1/100,000 s  |
| Slow Shutter      | Yes   |
| Day & Night       | IR Cut Filter   |
| WDR               | Digital WDR   |
| Angle Adjustment  | Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°  |
| Lens              |   |
| Lens Type         | Motorized lens, 2.8 to 12 mm  |
| Aperture          | F1.2 to 2.5   |
| Focus             | Auto, semi-auto, manual   |
| Auto-Iris         | P-iris  |
| FOV               | Horizontal FOV 101° to 36.1°, vertical FOV 72° to 27.2°, diagonal FOV 130° to 45.2°   |
| Lens Mount        | Integrated  |
| Illuminator       |   |
| IR Range          | Up to 30 m  |
| Wavelength        | 850 nm  |
| Video             |   |
| Max. Resolution   | 4000 × 3000   |
| Video Stream      | 5 defined streams and up to 5 custom stream   |
| Main Stream       | 50Hz: 20fps (4000 × 3000), 25fps (4096 × 2160, 3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>60Hz: 20fps(4000 × 3000), 30fps (4096 × 2160, 3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) |
| Sub Stream        | 50Hz: 25fps (704 × 576, 640 × 480)<br>60Hz: 30fps (704 × 480, 640 × 480)  |
| Third Stream      | 50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)  |
| Fourth Stream     | 50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)  |
| Fifth Stream      | 50Hz: 25fps (704 × 576, 640 × 480)<br>60Hz: 30fps (704 × 480, 640 × 480)  |

|                             |  |
|-----------------------------|--|
| Custom Stream               | 50Hz: 25fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60Hz: 30fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)   |
| Video Compression           | Main stream: H.265+/H.265/H.264+/H.264<br>Sub stream/third stream/fourth stream/fifth stream/custom stream:<br>H.265/H.264/MJPEG   |
| H.264 Type                  | Baseline Profile/Main Profile/High Profile   |
| H.264+                      | Main stream support  |
| H.265 Type                  | Main Profile   |
| H.265+                      | Main stream support  |
| Video Bit Rate              | 32 Kbps to 16 Mbps   |
| Scalable Video Coding (SVC) | H.264 and H.265 encoding   |
| <b>Audio</b>                |  |
| Audio Compression           | G.711/G.722.1/G.726/MP2L2/PCM/MP3  |
| Audio Bit Rate              | 64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/32Kbps(PCM)/ 8-320Kbps(MP3)  |
| Environment Noise Filtering | Yes  |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  |
| <b>Smart Feature-Set</b>    |  |
| Smart Event                 | Line crossing detection, up to 4 lines configurable<br>Intrusion detection, up to 4 regions configurable<br>Region entrance detection, up to 4 regions configurable<br>Region exiting detection, up to 4 regions configurable<br>Unattended baggage detection, up to 4 regions configurable<br>Object removal detection, up to 4 regions configurable<br>Face detection: detects faces and upload images<br>Scene change detection, audio exception detection, defocus detection |
| Basic Event                 | Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)   |
| Statistics                  | Counting   |
| Linkage Method              | Trigger recording: memory card, network storage, pre-record and post-record<br>Trigger captured pictures uploading: FTP, SFTP, HTTP, NAS, Email<br>Trigger notification: HTTP, ISAPI, alarm output, Email  |
| Region of Interest          | Main stream/sub stream/third stream/fourth stream/fifth stream: 4 fixed regions for each stream  |

| <b>Image</b>            |   |
|-------------------------|---|
| Image Enhancement       | BLC, HLC, 3D DNR, Defog, EIS, distortion correction   |
| Image Setting           | Rotate mode, saturation, brightness, contrast, sharpness, AGC, and white balance are adjustable by client software or web browser   |
| Target Cropping         | Yes   |
| Day/Night Switch        | Day/Night/Auto/Schedule/Triggered by Alarm In   |
| Picture Overlay         | LOGO picture can be overlaid on video with 128 × 128 24bit bmp format   |
| SNR                     | ≥52dB   |
| <b>Network</b>          |   |
| Network Storage         | microSD/SDHC/SDXC card (256 GB), local storage and NAS (NFS,SMB/CIFS), ANR<br>Together with high-end Hikvision memory card, memory card encryption and health detection are supported.  |
| Protocols               | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS  |
| API                     | ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, Ehome  |
| Smooth Streaming        | Yes   |
| 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 ONVIF, RTP/RTSP over HTTPS, control timeout settings, security audit log, TLS 1.2, TLS1.0, TLS1.1 |
| Simultaneous Live View  | Up to 20 channels   |
| User/Host               | Up to 32 users. 3 user levels: administrator, operator and user   |
| Client                  | iVMS-4200, Hik-Connect, Hik-Central   |
| Web Browser             | Plug-in required live view: IE8+<br>Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+<br>Local service: Chrome57.0+, Firefox52.0+   |
| <b>Interface</b>        |   |
| Audio                   | 1 input (line in, 3.5 mm), 1 output (line out, 3.5 mm), mono sound  |
| Communication Interface | 1 RJ45 10M/100M/1000M Ethernet port<br>1 RS-485 interface (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)   |
| Alarm                   | 1 input, 1 output (max. 24 VDC/VAC, 1A)   |
| Video Out               | 1Vp-p composite output (75 Ω/CVBS), only for adjustment   |
| Power Output            | 12 VDC, max. 200 mA   |

|                                  |  |
|----------------------------------|--|
| Interface Style                  | Connector panel  |
| On-board Storage                 | Built-in microSD/SDHC/SDXC slot, up to 256 GB  |
| <b>General</b>                   |  |
| Firmware Version                 | 5.6.0  |
| Web Client Language              | 32 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) |
| General Function                 | Anti-flicker, 5 streams and up to 5 custom streams, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter, HTTP listening  |
| Reset                            | Reset via reset button on camera body, web browser and client software   |
| Startup and Operating Conditions | -30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)  |
| Storage Conditions               | -30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)  |
| Power Supply                     | 12 VDC is recommended, 10 to 48 VDC; reverse polarity protection; two-core terminal block; PoE (802.3af, class 3)  |
| Power Consumption and Current    | With extra load: 12 VDC, 0.8 A, max. 10.5 W; PoE (802.3af, 36 V to 57 V), 0.2 A to 0.3 A, class 3<br>Without extra load: 12 VDC, 0.6 A, max. 8.0 W; PoE (802.3af, 36 V to 57 V), 0.2 A to 0.3 A, class 3<br>"with extra load" means that an extra device is connected to and powered by the camera.  |
| Material                         | Metal  |
| Sustainability                   | PVC FREE   |
| Dimensions                       | Camera: $\Phi 141 \times 123$ mm ( $\Phi 5.5'' \times 4.8''$ )<br>With package: $244 \times 174 \times 173$ mm ( $9.6'' \times 6.9'' \times 6.8''$ )   |
| Weight                           | Camera: approx. 900 g (1.98 lb.)<br>With Package: approx. 1250 g (2.76 lb.)  |
| <b>Approval</b>                  |  |
| EMC                              | 47 CFR Part 15, Subpart B; EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014; AS/NZS CISPR 32: 2015; ICES-003: Issue 6, 2016; KN 32: 2015, KN 35: 2015  |

|            |  |
|------------|--|
| Safety     | UL 60950-1, IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IS 13252(Part 1):2010+A1:2013+A2:2015 |
| Chemistry  | 2011/65/EU, 2012/19/EU, Regulation (EC) No 1907/2006   |
| Protection | Ingress protection: IK10 (IEC 62262:2002)  |

\* Listed resolutions are only selectable options. It does not mean that all streams can work at their maximum resolution at the same time.

**Available Model**

DS-2CD51C5G0-IZS (2.8 to 12 mm)

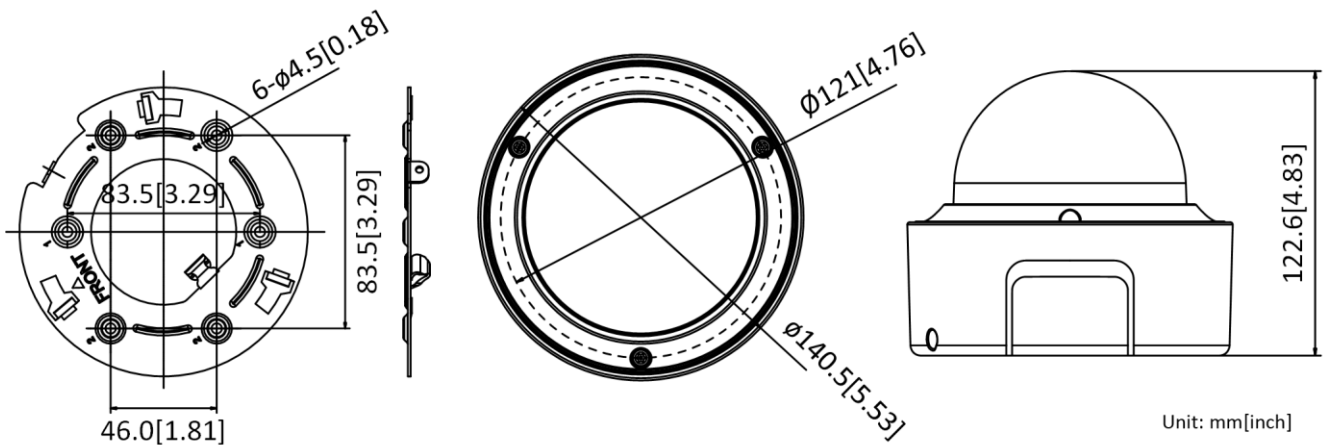
**▪ Typical Application**

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**



**DS-1273ZJ-130**  
**Wall Mount**



**DS-1273ZJ-130B**  
**Wall Mount**



**DS-1271ZJ-130**  
**Pendant Mount**



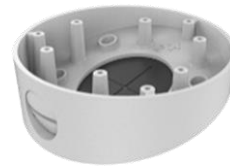
**DS-1279ZJ**  
**Pole**



**DS-1227ZJ**  
**In-ceiling Mount**



**DS-1276ZJ-SUS**  
**Corner Mount**



**DS-1281ZJ-DM23**  
**Inclined Ceiling Mount**



**DS-1275ZJ-SUS**  
**Vertical Pole Mount**



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