

## DS-2CD6984G1-IHSUY/NFC 32MP 180° PanoVu Network Camera

**DarkFighter** ✦



- 180° splicing image: the image presented includes the full panoramic view covered by the camera
- High resolution 32 MP: capturing clear images, and allowing for more details to be displayed on a video wall
- Remote motorized Pan and Tilt for easy angle adjustment
- Built-in heater, ultra-low temperature start up to -40 °C (-40 °F)
- Water and dust resistant (IP67) and vandal proof (IK10)
- DarkFighter technology captures high quality color images even in dimly light environments

## ▪ Specification

| Camera                      |  |
|-----------------------------|--|
| Image Sensor                | 1/1.8" Progressive Scan CMOS   |
| Max. Resolution             | 8160 × 3616  |
| Min. Illumination           | Color: 0.002 Lux @ (F1.0, AGC ON), B/W: 0.0005 Lux @ (F1.0, AGC ON)  |
| Shutter Time                | 1/25 s to 1/100,000 s  |
| Day & Night                 | IR cut filter  |
| Angle Adjustment            | Pan: 0° to 340°, tilt: 0° to 90°   |
| Lens                        |  |
| Lens Type                   | Fixed focal lens, 2.8 mm, four lenses  |
| Focal Length & FOV          | 2.8 mm,<br>Single lens image: horizontal FOV 108.8°, vertical FOV 56.4°, diagonal FOV 134.3°,<br>Panorama Image: horizontal FOV 185°, vertical FOV 100°  |
| Lens Mount                  | M16  |
| Aperture                    | F1.0   |
| DORI                        |  |
| DORI                        | 2.8 mm: D: 89.2 m, O: 35.4 m, R: 17.8 m, I: 8.9 m  |
| Illuminator                 |  |
| Supplement Light Type       | IR, four IR LEDs   |
| Supplement Light Range      | Up to 20 m   |
| IR Wavelength               | 850 nm   |
| Video                       |  |
| Main Stream                 | Panorama mode:<br>50 Hz: 25 fps (8160 × 3616)<br>60 Hz: 30 fps (8160 × 3616)<br>Original mode:<br>50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>60 Hz: 30 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) |
| Sub-Stream                  | Panorama mode:<br>50 Hz: 25 fps (1920 × 1080)<br>60 Hz: 30 fps (1920 × 1080)<br>Original mode:<br>50 Hz: 25 fps (1280 × 720)<br>60 Hz: 30 fps (1280 × 720)   |
| Video Compression           | Main stream: H.265+/H.265/H.264+/H.264,<br>Sub-stream: H.265/H.264/MJPEG   |
| Video Bit Rate              | 32 Kbps to 64 Mbps   |
| H.264 Type                  | Baseline Profile, Main Profile, High Profile   |
| H.265 Type                  | Main Profile   |
| Scalable Video Coding (SVC) | H.264 and H.265 encoding   |
| Region of Interest (ROI)    | 4 fixed regions for each stream  |
| Audio                       |  |
| Audio Compression           | G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC   |
| Audio Bit Rate              | 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/PCM/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)  |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/48 kHz   |

|                             |   |
|-----------------------------|---|
| Environment Noise Filtering | Yes   |
| <b>Network</b>              |   |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour   |
| Simultaneous Live View      | Up to 4 channels  |
| API                         | ONVIF (Profile S, Profile G), 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 1.2, TLS 1.3, TPM 2.0 (FIPS 140-2 level 2), AES128/256 |
| Network Storage             | NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)   |
| Client                      | iVMS-4200, Hik-Connect  |
| 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+, Safari 13+,<br>Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+   |
| <b>Image</b>                |   |
| Image Settings              | Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance, AGC, adjustable by client software or web browser  |
| Day/Night Switch            | Day, Night, Auto, Schedule, Alarm Trigger   |
| Wide Dynamic Range (WDR)    | Digital WDR   |
| SNR                         | ≥ 52 dB   |
| Image Enhancement           | BLC, HLC, 3D DNR, Distortion Correction, Defog  |
| Privacy Mask                | 8 programmable polygon privacy masks  |
| Picture Overlay             | LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.   |
| <b>Interface</b>            |   |
| Ethernet Interface          | 1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port  |
| On-Board Storage            | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1024 GB  |
| Built-in Microphone         | 2 built-in microphones  |
| Audio                       | 1 input (line in), two-core terminal block, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium,<br>1 output (line out), two-core terminal block, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium  |
| Alarm                       | 2 inputs, 2 outputs (max. 12 VDC, 1 A)  |
| RS-485                      | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)  |
| Reset Key                   | Yes   |
| Power Output                | 12 VDC, max. 150 mA   |
| Fiber Optical               | 1 FC fiber optical interface, SFP module, single mode, 20 km transmission distance, 1310 nm (TX) and 1550 nm (RX), 1250 Mbps transmission rate  |
| <b>Event</b>                |   |
| Basic Event                 | Motion detection, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error, abnormal restart), alarm input and output, audio exception detection  |

|                                  |   |
|----------------------------------|---|
| Linkage                          | Upload to FTP/NAS/memory card,notify surveillance center,send email,trigger alarm output,trigger recording,trigger capture,audible warning  |
| <b>Deep Learning Function</b>    |   |
| People Density                   | only panorama mode supports   |
| Perimeter Protection             | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggering by specified target types (human and vehicle)   |
| <b>General</b>                   |   |
| Power                            | 12 VDC $\pm$ 20%, 2.2 A, max. 26.4 W,<br>24 VAC $\pm$ 20%, 1.5 A, max. 24 W,three-core terminal block,<br>PoE: IEEE 802.3at, Class 4, max. 25 W   |
| Material                         | Aluminum alloy & plastic  |
| Dimension                        | $\varnothing$ 214.6 mm $\times$ 213 mm ( $\varnothing$ 8.45" $\times$ 8.39")  |
| Package Dimension                | 336 mm $\times$ 261 mm $\times$ 293 mm (13.2" $\times$ 10.3" $\times$ 11.5")  |
| Weight                           | Approx. 4.2 kg (9.25 lb.)   |
| With Package Weight              | Approx. 6.2 kg (13.67 lb.)  |
| Storage Conditions               | -40 $^{\circ}$ C to 60 $^{\circ}$ C (-40 $^{\circ}$ F to 140 $^{\circ}$ F). Humidity 95% or less (non-condensing)   |
| Startup and Operating Conditions | -40 $^{\circ}$ C to 60 $^{\circ}$ C (-40 $^{\circ}$ F to 140 $^{\circ}$ F). Humidity 95% or less (non-condensing)   |
| 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                 | Heartbeat,mirror,password protection,flash log,password reset via email,pixel counter,one-key reset,anti-banding  |
| Heater                           | Yes   |
| <b>Approval</b>                  |   |
| EMC                              | CE-EMC: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014, EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A1:2019+A2:2021,<br>RCM: AS/NZS CISPR 32: 2015,<br>IC: ICES-003: Issue 7,<br>KC: KN32: 2015, KN35: 2015  |
| Safety                           | CB: IEC 62368-1: 2014+A11,<br>CE-LVD: EN 62368-1: 2014/A11: 2017,<br>BIS: IS 13252 (Part 1): 2010/IEC 60950-1: 2005,<br>LOA: IEC/EN 60950-1   |
| 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  |
| Anti-Corrosion Protection        | NEMA 4X (NEMA 250-2018)   |

## ▪ Typical Application

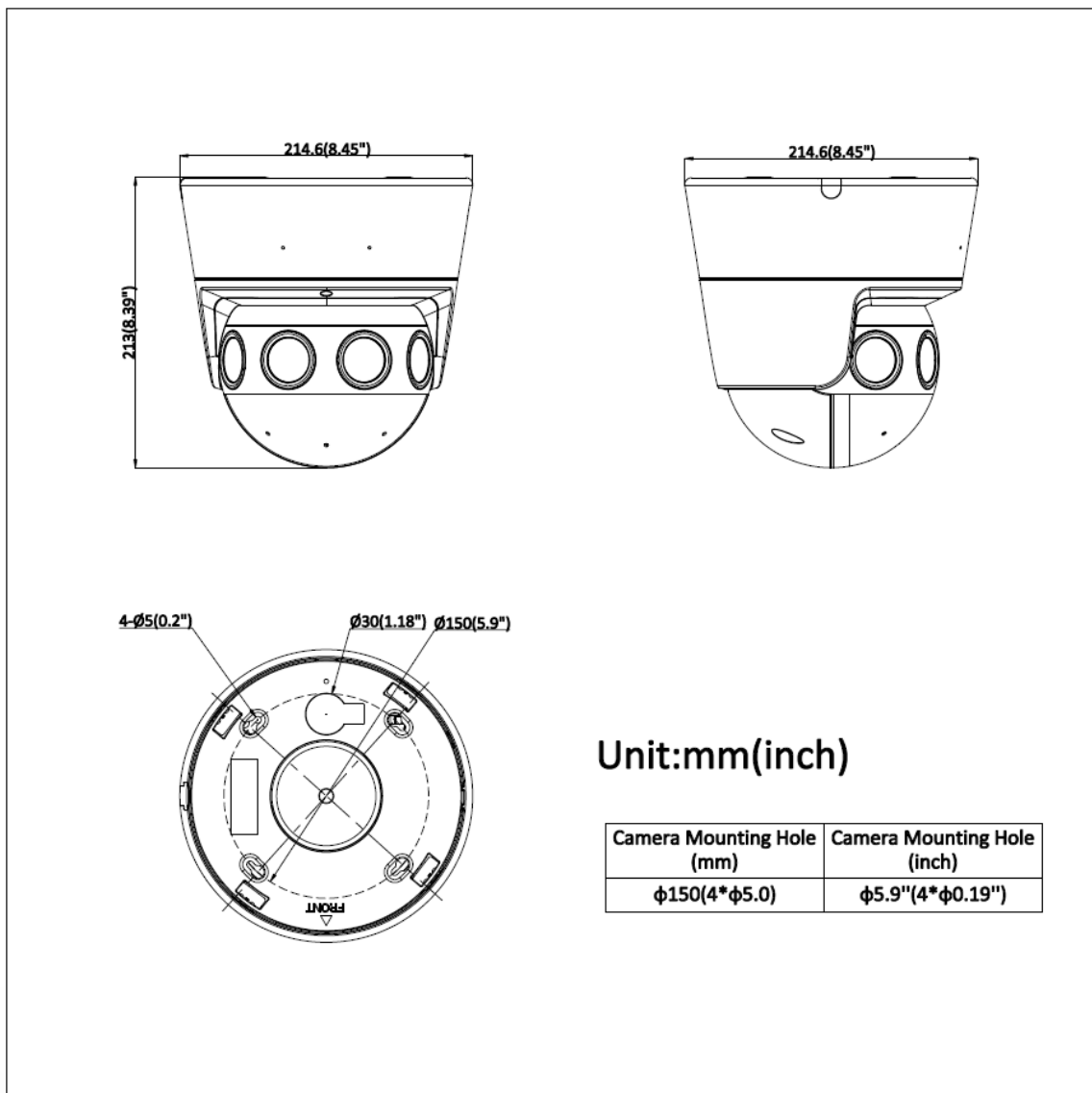
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has MODERATE 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-1602ZJ-Corner

DS-1604ZJ-box

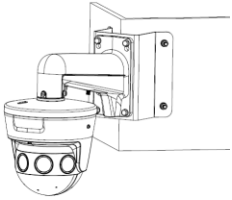
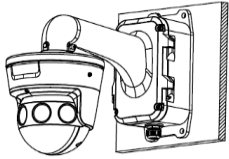
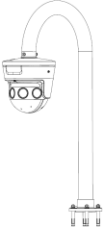
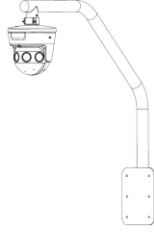
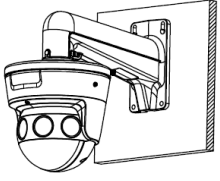
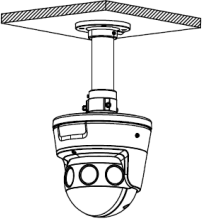
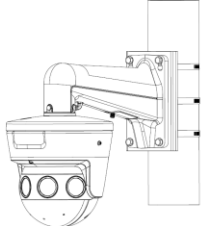
DS-1619ZJ

DS-1602ZJ

DS-1661ZJ

|   |   |   |   |   |
|---|---|---|---|---|
|  |  |  |  |  |
| <b>DS-1602ZJ-Pole</b>   | <b>DS-1660ZJ</b>  |   |   |   |
|  |  |   |   |   |

▪ **Installation Methods**

|   |   |   |  |   |
|---|---|---|--|---|
| <b>Corner Mounting</b><br>DS-1602ZJ-Corner  | <b>Junction Box</b><br>DS-1604ZJ-box  | <b>Gooseneck Mounting</b><br>DS-1619ZJ  | <b>Gooseneck Mounting</b><br>DS-1660ZJ   | <b>Wall Mounting</b><br>DS-1602ZJ   |
|  |  |  |  |  |
| <b>Pendant Mounting</b><br>DS-1661ZJ  | <b>Vertical Pole Mounting</b><br>DS-1602ZJ-Pole                                     |   |  |   |
|  |  |   |  |   |

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