# DS-2CD63165G2-S/RC
# 16MP DeepinView Fisheye Network Camera

DeepinView series



DS-2CD63165G2-S/RC is a fisheye network camera capable of providing a 360-degree panoramic image of its scene.
The progressive scan CMOS sensor provides high-resolution images of up to 4000 × 4000.
Up to 20 live view display modes, designed for 3 mount types, meet various user preferences.

- Heatmap: based on deep learning algorithms, the camera counts people and presents an intuitive map
- Multi dewarping modes: the image can be dewarped to normal image for viewing intuitively
- High resolution 16 MP: capturing clear images even when dewarped into 4-image PTZ mode
- Each image is clear and detailed

## ▪ Specification

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| **Camera** | |
| Image Sensor | 1/1.8" Progressive Scan CMOS |
| Max. Resolution | 4000 × 4000 |
| Min. Illumination | Color: 0.01 Lux @ (F2.0, AGC ON),B/W: 0.006 Lux @ (F2.0, AGC ON) |
| Shutter Time | 1/25 s~1/100,000 s |
| Day & Night | IR cut filter |
| **Lens** | |
| Lens Type | Fixed focal lens, 1.45 mm |
| Focal Length & FOV | 1.45 mm, horizontal FOV 180°, vertical FOV 180° |
| Iris Type | Fixed |
| Aperture | F2.0 |
| Depth of Field | 0.3 m to ∞ |
| **Pixel Density** | |
| O2DCPVS | Overview: 46.8 m, Outline: 23.4 m, Discern: 11.7 m, Perceive: 7.5 m, Characterize: 3.7 m, Validate: 1.9 m, Scrutinize: 0.6 m(Central Area) |

## Video

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| Main Stream | 【50Hz】<br>Fisheye View:<br>4000 × 4000; ( up to 20fps )<br>3504 × 3504 , 3024 × 3024 , 2560 × 2560; ( up to 25fps )<br>180 Panorama View:<br>4608 x 3456 ( up to 20fps ) ;<br>4000 x 3000 , 3456 x 2592 , 3072 x 2304 , 2560 x 1920; ( up to 25fps )<br>Panorama View:<br>4608 x 3456 ; ( up to 20fps )<br>3072 x 2304 , 2048 x 1536 ; ( up to 25fps )<br>180 Dual Channel Panorama View:<br>camera 01 : 3072 × 1152 ; ( up to 20fps )<br>camera 02 : 3072 × 1152 ; ( up to 25fps )<br>4PTZ View:<br>camera 01/camera 02/camera 03/camera 04 : 1600 × 1200 ; ( up to 25fps )<br>Fisheye + 3PTZ View:<br>camera 01 : 2560 × 2560 , 2048 × 2048 , 1280 × 1280 ; ( up to 25fps )<br>camera 02/camera 03/camera 04 : 1600 × 1200 ; ( up to 25fps )<br>4PTZ Fusion View:<br>3200 × 2400 , 2048 × 1536 ; ( up to 20fps )<br><br>【60Hz】<br>Fisheye View:<br>4000 × 4000; ( up to 20fps )<br>3504 × 3504 , 3024 × 3024 , 2560 × 2560; ( up to 30fps )<br>180 Panorama View:<br>4608 x 3456 ( up to 20fps ) ;<br>4000 x 3000 , 3456 x 2592 , 3072 x 2304 , 2560 x 1920; ( up to 24fps )<br>Panorama View:<br>4608 x 3456 ; ( up to 20fps )<br>3072 x 2304 , 2048 x 1536 ; ( up to 30fps )<br>180 Dual Channel Panorama View:<br>camera 01 : 3072 × 1152 ; ( up to 20fps )<br>camera 02 : 3072 × 1152 ; ( up to 30fps )<br>4PTZ View:<br>camera 01/camera 02/camera 03/camera 04 : 1600 × 1200 ; ( up to 30fps )<br>Fisheye + 3PTZ View:<br>camera 01 : 2560 × 2560 , 2048 × 2048 , 1280 × 1280 ; ( up to 30fps )<br>camera 02/camera 03/camera 04 : 1600 × 1200 ; ( up to 30fps )<br>4PTZ Fusion View: |

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| Sub-Stream | 【50Hz】<br>Fisheye View:<br>720 x 720 ，640 x 640; ( up to 25fps )<br>180 Panorama View:<br>640 x 480 ，640 x 320 ，320 x 240 ； ( up to 25fps ) ；<br>Panorama View:<br>640 x 480 ，640 x 320 ，320 x 240 ； ( up to 25fps ) ；<br>180 Dual Channel Panorama View:<br>camera 01 ：640 x 240 ； ( up to 20fps )<br>camera 02 ：640 x 240 ； ( up to 25fps )<br>4PTZ View:<br>camera 01/camera 02/camera 03/camera 04 ：640 x 480 ，640 x 320 ，320 x 240 ；( up to 25fps ) ；<br>Fisheye + 3PTZ View:<br>camera 01 ：720 x 720 ，640 x 640 ； ( up to 25fps )<br>camera 02/camera 03/camera 04 ：640 x 480 ，640 x 320 ，320 x 240 ； ( up to 25fps )<br>4PTZ Fusion View:<br>No ；<br>【60Hz】<br>Fisheye View:<br>720 x 720 ，640 x 640; ( up to 30fps )<br>180 Panorama View:<br>640 x 480 ，640 x 320 ，320 x 240 ； ( up to 24fps ) ；<br>Panorama View:<br>640 x 480 ，640 x 320 ，320 x 240 ； ( up to 30fps ) ；<br>180 Dual Channel Panorama View:<br>camera 01 ：640 x 240 ； ( up to 20fps )<br>camera 02 ：640 x 240 ； ( up to 30fps )<br>4PTZ View:<br>camera 01/camera 02/camera 03/camera 04 ：640 x 480 ，640 x 320 ，320 x 240 ；( up to 30fps ) ；<br>Fisheye + 3PTZ View:<br>camera 01 ：720 x 720 ，640 x 640 ； ( up to 24fps )<br>camera 02/camera 03/camera 04 ：640 x 480 ，640 x 320 ，320 x 240 ； ( up to 24fps )<br>4PTZ Fusion View:<br>No ； |

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| 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 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) | 4 fixed regions for each stream |
| **Fisheye Display** | |
| Mount Type | Support wall/table/ceiling mounting |
| Decoding Mode | Support hardware decoding and software decoding |
| Display Mode | 20 display modes in total,<br>Software decoding: fisheye view, 180 panorama view, 360 panorama view, 360 panorama + PTZ, 360 panorama + 3PTZ, 360 panorama + 6PTZ, 360 panorama + 8PTZ, 2PTZ, 4PTZ, fisheye + 3PTZ, fisheye + 8PTZ, hemisphere, AR hemisphere, cylinder,<br>Hardware decoding: fisheye view, 180 panorama view, 180 dual channel panorama, panorama view, 4PTZ, fisheye + 3PTZ, 4PTZ fusion |
| **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)/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 |
| **Network** | |
| Protocols | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, ISUP, ARP, WebSocket, WebSockets, SIP |
| Simultaneous Live View | Up to 20 channels |
| API | Open Network Video Interface (Profile S, Profile G, Profile T),ISAPI,SDK,ISUP,<br>Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX |
| 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, host authentication (MAC address) |
| Network Storage | NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR),<br>Together with high-end Hikvision memory card, memory card encryption and health detection are supported. |
| Client | iVMS-4200,iVMS-4500,iVMS-5200,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 11+,<br>Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+ |

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| **Image** | |
| Image Parameters Switch | Yes |
| Image Settings | saturation,brightness,contrast,sharpness,white balance,adjustable by client software or web browser,gain |
| Day/Night Switch | Day,Night,Auto,Schedule |
| Wide Dynamic Range (WDR) | Digital WDR |
| Defog | Yes |
| Image Enhancement | BLC,HLC,3D DNR |
| Privacy Mask | 8 programmable polygon privacy masks |
| Picture Overlay | LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format. |
| **Interface** | |
| 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 512 GB |
| Built-in Microphone | Yes, 4 built-in microphones |
| Audio | 1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium,<br>1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium |
| Alarm | 2 inputs, 2 outputs (max. 24 VDC, 1 A) |
| RS-485 | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive) |
| Reset Key | 1 Reset Key |
| **Event** | |
| Basic Event | Motion Detection, Video Tampering alarm,Exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error), Alarm Input , Video Quality Diagnosis , Audio Exception Detection , Defocus Detection , Scene Change Detection |
| Smart Event | Line crossing detection, intrusion detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection, loitering detection, people gathering detection, people running detection, parking detection |
| Linkage | Upload to FTP/NAS/memory card,notify surveillance center,send email,trigger alarm output,trigger recording,trigger capture |
| **Deep Learning Function** | |
| People Counting | Counts people entering, exiting and passing by separately (The data is stored in the flash.)<br>Supports real-time uploading and uploading by statistic cycle<br>Sends email reports on daily, weekly, monthly or annually basis<br>Supports up to 3 detection regions, and independent arming schedule and linkage method |

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| Queue Management | Supports up to 8 detection regions, and independent arming schedule and linkage method<br>Supports 2 detection modes: regional people queuing-up, waiting time detection<br>Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue<br>Supports raw data export for further analysis<br>Supports real-time data uploading and scheduled data uploading<br>Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold<br>Waiting time detection: supports 1 alarm trigger condition, including greater than threshold |
| Heat Map | A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area.,<br>Two report types are available, space heat map and time heat map line chart. |
| Intersection Analysis | Detects and analyze flow in an intersection-like scene, and generate reports<br>Support one intersection of up to 10 ways |
| **General** | |
| Power | 12 VDC ± 20%, 0.7 A, max. 8.4 W,two-core terminal block,<br>PoE: IEEE 802.3af, Class 3, max. 9.5 W |
| Material | Base: Metal, cover: Plastic |
| Dimension | Ø165.0 mm × 48.9 mm (Ø6.49" × 1.93") |
| Package Dimension | 272 mm × 215 mm × 105 mm (10.7" × 8.5" × 4.1") |
| Weight | Approx. 470 g (1.04 lb.) |
| With Package Weight | Approx. 884 g (1.95 lb.) |
| Storage Conditions | -10 °C to 40 °C (-10 °F to 104 °F). Humidity 95% or less (non-condensing) |
| Startup and Operating Conditions | -10 °C to 40 °C (-10 °F to 104 °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,flash log,password reset via email,password protection,one-key reset,anti-banding |
| Cable Length | 0.31 m (1.02 ft.) |
| **Approval** | |
| 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 | UL: UL 62368-1,<br>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 |
| Environment | CE-RoHS: 2011/65/EU,<br>WEEE: 2012/19/EU,<br>Reach: Regulation (EC) No 1907/2006 |

## ▪ Typical Application

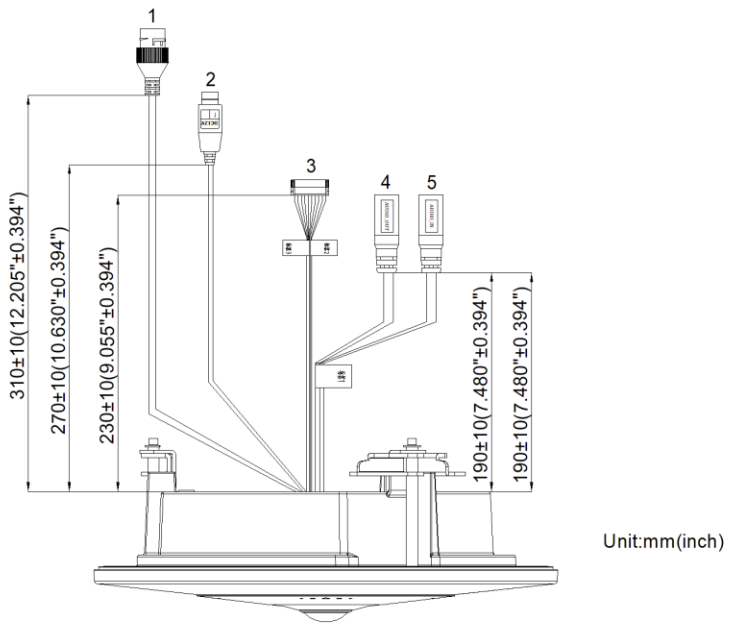
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

This model has NO SPECIFIC PROTECTION.

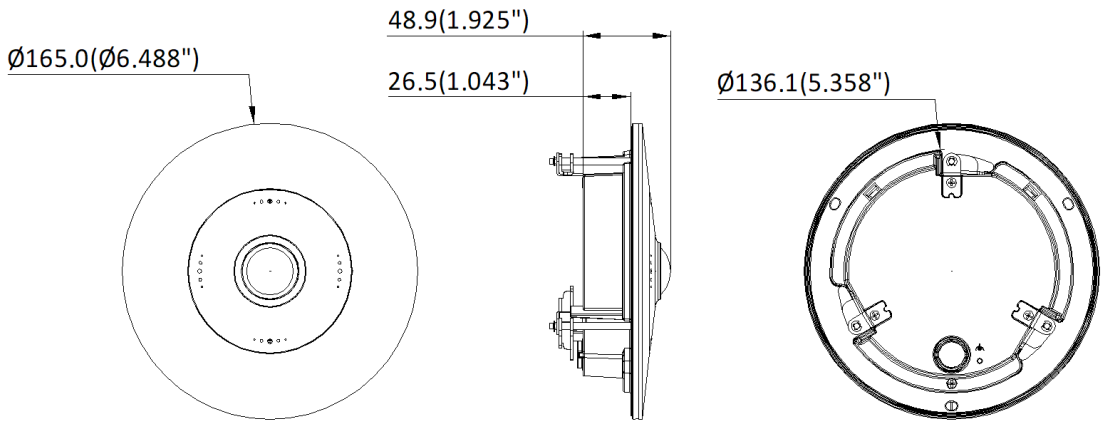
| Level | Description |
|---|---|
| Top-level protection | Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more. |
| Moderate protection | Hikvision products 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. |

## ▪ Physical Interface

| No. | Interface Description |
|---|---|
| 1 | Network Interface |
| 2 | Power Interface |
| 3 | Alarm Interface, RS-485 |
| 4 | Audio Output Interface |
| 5 | Audio Input Interface |




## ▪ Dimension




Unit:mm(inch)

| Camera Mounting Hole(mm) | Camera Mounting Hole(inch) |
|---|---|
| Ø140 | Ø5.512" |

See Far, Go Further

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