

## DS-2CD5A46G0-IZHS(A) 4 MP DarkFighter Varifocal Bullet Network Camera



**DarkFighter**



Empowered by deep learning algorithms, Hikvision AcuSense technology brings human or vehicle target classification alarms to front- and back-end devices. The system can greatly reduce false alarms generated by targets other than humans or vehicles, vastly improving alarm efficiency and effectiveness.

- High quality imaging with 4 MP resolution
- Excellent low-light performance with DarkFighter technology
- Efficient H.265+ compression technology
- Clear imaging against strong back light due to 140 dB WDR technology
- False alarm reduction through human and vehicle target classification based on deep learning
- Motorized varifocal lens for easy installation and monitoring
- Audio and alarm interface available
- Water and dust resistant (IP67) and vandal-resistant (IK10)



## ▪ Specification

| Camera                 |                                                                                                                                                                                                           |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor           | 1/1.8" Progressive Scan CMOS                                                                                                                                                                              |
| Min. Illumination      | 0.0014 Lux @ (F1.4, AGC ON), 0 Lux with IR on                                                                                                                                                             |
| Shutter Speed          | 1/3 s to 1/100,000 s                                                                                                                                                                                      |
| Slow Shutter           | Yes                                                                                                                                                                                                       |
| P/N                    | P/N                                                                                                                                                                                                       |
| Wide Dynamic Range     | 140 dB                                                                                                                                                                                                    |
| Day & Night            | ICR Cut                                                                                                                                                                                                   |
| Angle Adjustment       | Pan: 0° to 360°, tilt: 0° to 90°, rotate: 0° to 360°                                                                                                                                                      |
| Lens                   |                                                                                                                                                                                                           |
| Iris Type              | P-Iris                                                                                                                                                                                                    |
| Lens Mount             | Integrated                                                                                                                                                                                                |
| Lens Type & FOV        | 2.8 to 12 mm: horizontal FOV 107.4° to 39.8°, vertical FOV 56° to 22.3°, diagonal FOV 130° to 45.7°<br>8 to 32 mm: horizontal FOV 42.5° to 15.1°, vertical FOV 23.4° to 8.6°, diagonal FOV 49.6° to 17.3° |
| Aperture               | 2.8 to 12 mm: F1.2 to F2.5<br>8 to 32 mm: F1.8                                                                                                                                                            |
| DORI                   |                                                                                                                                                                                                           |
| DORI                   | 2.8 to 12 mm: D: 61.2 m to 151.7 m, O: 24.3 m to 60.2 m, R: 12.2 m to 30.3 m, I: 6.1 m to 15.2 m<br>8 to 32 mm: D: 150.3 m to 400 m, O: 59.7 m to 158.7 m, R: 30.1 m to 80 m, I: 15 m to 40 m             |
| Illuminator            |                                                                                                                                                                                                           |
| IR Range               | 2.8 to 12 mm: up to 60 m<br>8 to 32 mm: up to 100 m                                                                                                                                                       |
| Wavelength             | 850 nm                                                                                                                                                                                                    |
| Smart Supplement Light | Yes                                                                                                                                                                                                       |
| Video                  |                                                                                                                                                                                                           |
| Max. Resolution        | 2688 × 1520                                                                                                                                                                                               |
| Main Stream            | 50Hz: 25 fps (2688 × 1520, 2304 × 1296, 1920 × 1080, 1280 × 720)<br>60Hz: 30 fps (2688 × 1520, 2304 × 1296, 1920 × 1080, 1280 × 720)                                                                      |
| Sub-Stream             | 50Hz: 25 fps (640 × 480, 640 × 360, 320 × 240)<br>60Hz: 30 fps (640 × 480, 640 × 360, 320 × 240)                                                                                                          |
| Third Stream           | 50Hz: 15 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)<br>60Hz: 15 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)                                                                                  |
| Fourth Stream          | 50Hz: 15 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)<br>60Hz: 15 fps (1280 × 720, 640 × 480, 640 × 360, 320 × 240)<br>*Fourth 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>Fourth stream: H.265/H.264/MJPEG                                                                  |

|                             |                                                                                                                                                                                                                                                                                        |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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)    | 5 fixed regions for main stream and sub-stream                                                                                                                                                                                                                                         |
| e-PTZ                       | Support Preset and Patrol settings<br>*Only the fourth stream supports this function.                                                                                                                                                                                                  |
| <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              | 64Kbps(G.711ulaw/G.711alaw)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/8-320Kbps(MP3)                                                                                                                                                                                             |
| <b>Network</b>              |                                                                                                                                                                                                                                                                                        |
| Smooth Streaming            | Yes                                                                                                                                                                                                                                                                                    |
| Simultaneous Live View      | Up to 6 channels                                                                                                                                                                                                                                                                       |
| API                         | Open Network Video Interface (PROFILE S, PROFILE G, RPROFILE T), ISAPI, SDK                                                                                                                                                                                                            |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SFTP, ISUP, ARP, 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 1.2, WSSE and digest authentication for Open Network Video Interface, memory card encryption, SFTP encryption, SRTP encryption |
| Network Storage             | MicroSD/SDHC/SDXC card (256 GB) local storage, and NAS(NFS, SMB/CIFS), auto network replenishment (ANR)                                                                                                                                                                                |
| 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+<br>Local service: Chrome 57.0+, Firefox 52.0+                                                                                                                                         |
| <b>Image</b>                |                                                                                                                                                                                                                                                                                        |
| Day/Night Switch            | Day, Night, Auto, Schedule                                                                                                                                                                                                                                                             |
| Target Cropping             | Yes                                                                                                                                                                                                                                                                                    |
| Image Enhancement           | BLC, HLC, 3D DNR, EIS, Defog                                                                                                                                                                                                                                                           |
| Image Parameters Switch     | Yes                                                                                                                                                                                                                                                                                    |
| Image Settings              | Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser                                                                                                                                                             |
| <b>Interface</b>            |                                                                                                                                                                                                                                                                                        |
| Alarm                       | 3 inputs, 3 outputs (max. 24 VDC, 1 A; 24 VAC, 1 A)                                                                                                                                                                                                                                    |

|                                  |                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Audio                            | 1 input (line in), two-core terminal block, max. input amplitude: 3.3 vpp, input impedance: 4.7 K $\Omega$ , interface type: non-equilibrium;<br>1 output (line out), two-core terminal block, max. output amplitude: 3.3 vpp, output impedance: 100 $\Omega$ , interface type: non-equilibrium                                                         |
| RS-485                           | 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)                                                                                                                                                                                                                                                                                      |
| On-board Storage                 | Built-in micro SD/SDHC/SDXC slot, up to 256 GB                                                                                                                                                                                                                                                                                                          |
| Hardware Reset                   | Yes                                                                                                                                                                                                                                                                                                                                                     |
| Communication Interface          | 1 RJ45 10M/100M self-adaptive Ethernet port                                                                                                                                                                                                                                                                                                             |
| Power Output                     | 12 VDC, 100 mA                                                                                                                                                                                                                                                                                                                                          |
| Heater                           | Yes                                                                                                                                                                                                                                                                                                                                                     |
| <b>Event</b>                     |                                                                                                                                                                                                                                                                                                                                                         |
| Basic Event                      | Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, HDD full, HDD error)                                                                                                                                                                                                                      |
| Smart Event                      | Unattended baggage detection, object removal detection, scene change detection, audio exception detection, video quality diagnosis                                                                                                                                                                                                                      |
| <b>Deep Learning Function</b>    |                                                                                                                                                                                                                                                                                                                                                         |
| Face Capture                     | Yes                                                                                                                                                                                                                                                                                                                                                     |
| Perimeter Protection             | Line crossing detection, intrusion detection, region entrance detection, region exiting detection                                                                                                                                                                                                                                                       |
| <b>General</b>                   |                                                                                                                                                                                                                                                                                                                                                         |
| Linkage Method                   | Upload to NAS/memory card, notify surveillance center, trigger record, trigger capture, audible warning, FTP, Email                                                                                                                                                                                                                                     |
| Web Client Language              | 33 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), Ukrainian |
| General Function                 | Anti-flicker, heartbeat, mirror, privacy masks, flash log, password reset via e-mail, pixel counter                                                                                                                                                                                                                                                     |
| Software Reset                   | Yes                                                                                                                                                                                                                                                                                                                                                     |
| Storage Conditions               | -40 °C to 60 °C (-40 °F to 140 °F), humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                               |
| Startup and Operating Conditions | -40 °C to 60 °C (-40 °F to 140 °F), humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                               |
| Power Supply                     | 12 VDC $\pm$ 25%<br>24 VAC $\pm$ 20%<br>PoE                                                                                                                                                                                                                                                                                                             |
| Power Consumption                | max. 10 W                                                                                                                                                                                                                                                                                                                                               |
| Power Interface                  | Two-core terminal block                                                                                                                                                                                                                                                                                                                                 |
| Camera Dimension                 | $\varnothing$ 105 $\times$ 340.8 mm ( $\varnothing$ 4.1" $\times$ 13.4")                                                                                                                                                                                                                                                                                |
| Package Dimension                | 385 $\times$ 190 $\times$ 180 mm (15.2" $\times$ 7.5" $\times$ 7.1")                                                                                                                                                                                                                                                                                    |
| Camera Weight                    | Approx. 1400 g (3.1 lb.)                                                                                                                                                                                                                                                                                                                                |
| With Package Weight              | Approx. 2250 g (5.0 lb.)                                                                                                                                                                                                                                                                                                                                |

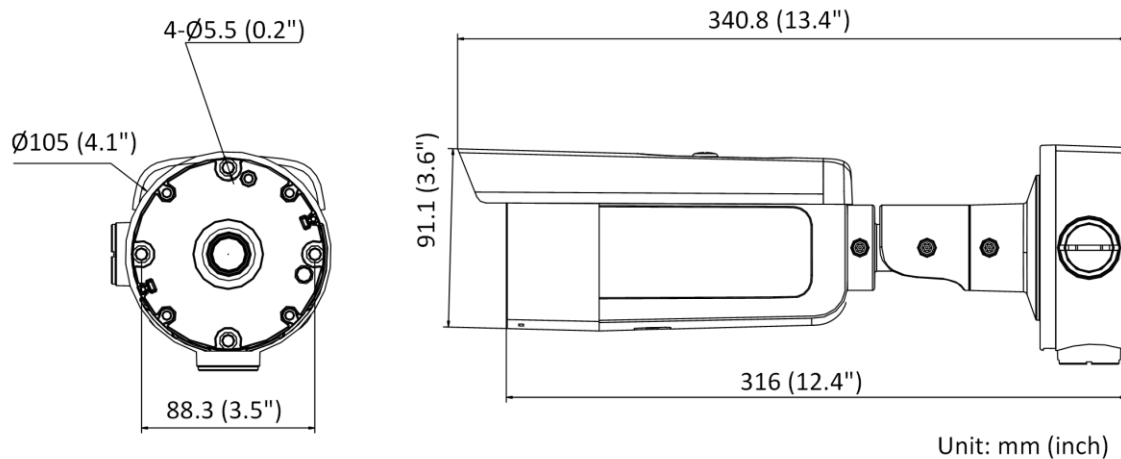
## Approval

|             |                                                                                                                                                                                                                                             |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EMC         | FCC SDoC (47 CFR Part 15, Subpart B);<br>CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014);<br>RCM (AS/NZS CISPR 32: 2015);<br>IC VoC (ICES-003: Issue 6, 2016);<br>KC (KN 32: 2015, KN 35: 2015) |
| Safety      | UL (UL 60950-1);<br>CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014);<br>CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014);<br>BIS (IS 13252(Part 1):2010+A1:2013+A2:2015);<br>LOA (IEC/EN 60950-1)         |
| Environment | CE-RoHS (2011/65/EU); WEEE (2012/19/EU);<br>Reach (Regulation (EC) No 1907/2006)                                                                                                                                                            |
| Protection  | IP67 (IEC 60529-2013), IK10 (IEC 62262:2002)                                                                                                                                                                                                |

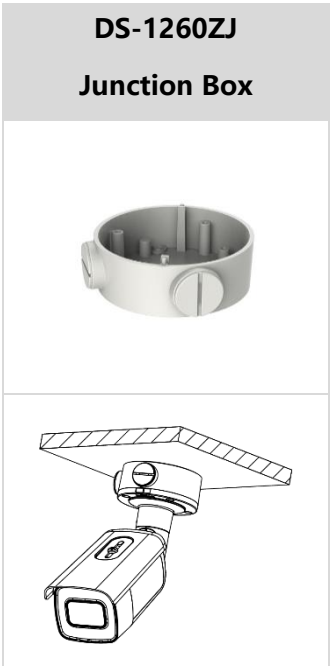
## ▪ Available Model

DS-2CD5A46G0-IZHS(A) (2.8 to 12 mm)

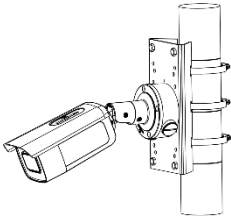
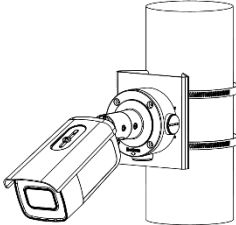
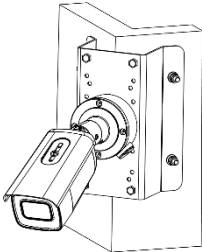
## ▪ Dimension



- Accessory
- Included



- Optional

| DS-1275ZJ-SUS<br>Vertical Pole<br>Mount                                             | DS-1275ZJ-S-SUS<br>Vertical Pole Mount                                              | DS-1276ZJ-SUS<br>Corner Mount                                                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |
|  |  |   |

Distributed by

**HIKVISION®****Headquarters**

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

**Hikvision USA**  
T +1-909-895-0400  
sales.usa@hikvision.com

**Hikvision Australia**  
T +61-2-8599-4233  
salesau@hikvision.com

**Hikvision India**  
T +91-22-28469900  
sales@pramahikvision.com

**Hikvision Canada**  
T +1-866-200-6690  
sales.canada@hikvision.com

**Hikvision Thailand**  
T +662-275-9949  
sales.thailand@hikvision.com

**Hikvision Europe**  
T +31-23-5542770  
sales.eu@hikvision.com

**Hikvision Italy**  
T +39-0438-6902  
info.it@hikvision.com

**Hikvision Brazil**  
T +55 11 3318-0050  
Latam.support@hikvision.com

**Hikvision Turkey**  
T +90 (216)521 7070- 7074  
sales.tr@hikvision.com

**Hikvision Malaysia**  
T +601-7652-2413  
sales.my@hikvision.com

**Hikvision UK & Ireland**  
T +01628-902140  
sales.uk@hikvision.com

**Hikvision South Africa**  
Tel: +27 (10) 0351172  
sale.africa@hikvision.com

**Hikvision France**  
T +33(0)1-85-330-450  
info.fr@hikvision.com

**Hikvision Kazakhstan**  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

**Hikvision Vietnam**  
T +84-974270888  
sales.vt@hikvision.com

**Hikvision UAE**  
T +971-4-4432090  
salesme@hikvision.com

**Hikvision Singapore**  
T +65-6684-4718  
sg@hikvision.com

**Hikvision Spain**  
T +34-91-737-16-55  
info.es@hikvision.com

**Hikvision Tashkent**  
T +99-87-1238-9438  
uzb@hikvision.ru

**Hikvision Hong Kong**  
T +852-2151-1761  
info.hk@hikvision.com

**Hikvision Russia**  
T +7-495-669-67-99  
saleru@hikvision.com

**Hikvision Korea**  
T +82-(0)31-731-8817  
sales.korea@hikvision.com

**Hikvision Poland**  
T +48-22-460-01-50  
info.pl@hikvision.com

**Hikvision Indonesia**  
T +62-21-2933759  
Sales.Indonesia@hikvision.com

**Hikvision Colombia**  
sales.colombia@hikvision.com