

## iDS-2CD7A46G0/P-IZHS(Y) 4 MP ANPR IR Varifocal Bullet Network Camera

DarkFighter



### ▪ DeepinView<sup>series</sup>

- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 140 dB WDR technology
- License Plate Recognition
- Efficient H.265+ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Water and dust resistant (IP67) and vandal proof (IK10)





## ▪ **Function**

### Road Traffic and Vehicle Detection

With embedded deep learning based license plate capture and recognition algorithms, the camera alone can achieve plate capture and recognition. The algorithm enjoys the high recognition accuracy of common plates and complex-structured plates, which is a great step forward comparing to traditional algorithms. Blocklist and allowlist are available for plate categorization and separate alarm triggering.

## ▪ Specification

| Camera                 |  |
|------------------------|--|
| Image Sensor           | 1/1.8" Progressive Scan CMOS   |
| Max. Resolution        | 2688 × 1520  |
| Min. Illumination      | Color: 0.0005 Lux @ (F1.2, AGC ON);<br>B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR   |
| Shutter Time           | 1 s to 1/100,000 s   |
| Day & Night            | IR cut filter<br>Blue glass module to reduce ghost phenomenon  |
| Lens                   |  |
| Focal Length & FOV     | 2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal FOV: 141.1° to 48°<br>8 to 32 mm, horizontal FOV: 42.5° to 15.1°, vertical FOV: 23.3° to 8.64°, diagonal FOV: 49.6° to 17.3°                         |
| Focus                  | Auto, semi-auto, manual  |
| Iris Type              | P-iris   |
| Aperture               | 2.8 to 12 mm: F1.2 to F2.5<br>8 to 32 mm: F1.7 to F1.73  |
| DORI                   |  |
| DORI                   | Wide:<br>2.8 to 12 mm: D: 60 m, O: 23.8 m, R: 12 m, I: 6 m<br>8 to 32 mm: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15 m<br>Tele:<br>2.8 to 12 mm: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m<br>8 to 32 mm: D: 400 m, O: 158.7 m, R: 80 m, I: 40 m |
| Illuminator            |  |
| Supplement Light Type  | IR   |
| Supplement Light Range | 2.8 to 12 mm: 50 m<br>8 to 32 mm: 100 m  |
| Smart Supplement Light | Yes  |
| IR Wavelength          | 850 nm   |
| Video                  |  |
| Main Stream            | 50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)   |
| Sub-Stream             | 50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 30 fps (704 × 480, 640 × 480)   |
| Third Stream           | 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)   |
| Fourth Stream          | 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)   |
| Fifth Stream           | 50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 30 fps (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: 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   |
| Bit Rate Control            | CBR/VBR  |
| Scalable Video Coding (SVC) | H.265 and H.264 encoding   |
| Region of Interest (ROI)    | 4 fixed regions for each stream  |
| Target Cropping             | Yes  |
| <b>Audio</b>                |  |
| Audio Type                  | Mono sound   |
| Audio Compression           | G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3  |
| Audio Bit Rate              | 64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64 Kbps (AAC)/8 to 320 Kbps (MP3)   |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  |
| Environment Noise Filtering | Yes  |
| <b>Network</b>              |  |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS   |
| Simultaneous Live View      | Up to 20 channels  |
| API                         | Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, ISUP   |
| User/Host                   | Up to 32 users. 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 |
| 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, 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: Chrome 41.0+, Firefox 30.0+  |
| <b>Image</b>                |  |
| Image Parameters Switch     | Yes  |
| Image Settings              | Saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser  |
| Day/Night Switch            | Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger   |
| Wide Dynamic Range (WDR)    | 140 dB   |
| SNR                         | ≥ 52 dB  |
| Image Enhancement           | BLC, HLC, Defog, 3D DNR  |
| Picture Overlay             | LOGO picture can be overlaid on video with 128 × 128 24bit bmp format  |
| Image Stabilization         | EIS  |
| <b>Interface</b>            |  |
| Video Output                | 1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)   |
| 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 256 GB   |
| Audio  | With -Y: 1 input (line in), 1 output (line out), 3.5 mm connector   |
| Alarm  | 2 input, 2 outputs (max. 24 VDC, 1 A)   |
| RS-485   | With -Y: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)   |
| Reset Key  | Yes   |
| Power Output   | With -Y: 12 VDC, max. 100 mA  |
| Wiegand  | /P-Y: 1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit, NEWG 72bit)  |
| <b>Event</b>   |   |
| Basic Event  | Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection   |
| Smart Event  | Intrusion detection, scene change detection, audio exception detection, defocus detection<br>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                            |
| Linkage  | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture   |
| <b>Deep Learning Function</b>  |   |
| Perimeter Protection   | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggering by specified target types   |
| Road Traffic and Vehicle Detection   | Blocklist and allowlist: up to 10,000 records<br>Captures vehicle that has no license plate<br>Support license plate recognition of motorcycles (only in checkpoint scenario)<br>Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)   |
| Metadata   | Metadata of road traffic is supported.  |
| <b>General</b>   |   |
| Power  | 12 VDC $\pm$ 20%, 1.19 A, max. 14.28 W, three-core terminal block<br>PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.396 A to 0.295 A, max. 16.8 W  |
| Material   | Aluminum alloy body   |
| Dimension  | Without -Y: $\varnothing$ 144 $\times$ 347 mm ( $\varnothing$ 5.7" $\times$ 13.7")<br>With -Y: $\varnothing$ 140 $\times$ 351 mm ( $\varnothing$ 5.5" $\times$ 13.8")   |
| Package Dimension  | 405 $\times$ 190 $\times$ 180 mm (15.9" $\times$ 7.5" $\times$ 7.1")  |
| Weight   | Approx. 1950 g (4.2 lb.)  |
| With Package Weight  | Approx. 3070 g (6.7 lb.)  |
| Storage Conditions   | -30 $^{\circ}$ C to 60 $^{\circ}$ C (-22 $^{\circ}$ 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   | Anti-flicker, 5 streams, EPTZ, heartbeat, mirror, privacy mask, flash log, password reset   |
| <a href="https://www.conecticplus.com">https://www.conecticplus.com</a><br>in email, pixel counter |   |

| Approval                  |   |
|---------------------------|---|
| EMC                       | FCC (47 CFR Part 15, Subpart B);<br>CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN 50130-4: 2011 +A1: 2014);<br>RCM (AS/NZS CISPR 32: 2015);<br>IC (ICES-003: Issue 7);<br>KC (KN 32: 2015, KN 35: 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);<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                | IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)  |
| Anti-Corrosion Protection | With -Y: NEMA 4X(NEMA 250-2018)   |
| Automotive and Railway    | EN50121-4   |
| Other                     | PVC FREE  |

### ▪ Available Model

iDS-2CD7A46G0/P-IZHSY (2.8 to 12 mm, 8 to 32 mm)

iDS-2CD7A46G0/P-IZHS (2.8 to 12 mm, 8 to 32 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.

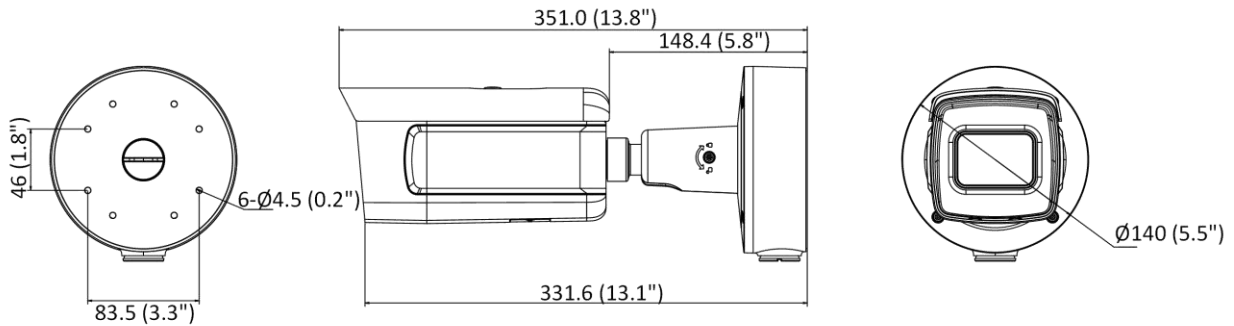
-Y model: This model has MODERATE PROTECTION.

Without -Y model: 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.  |

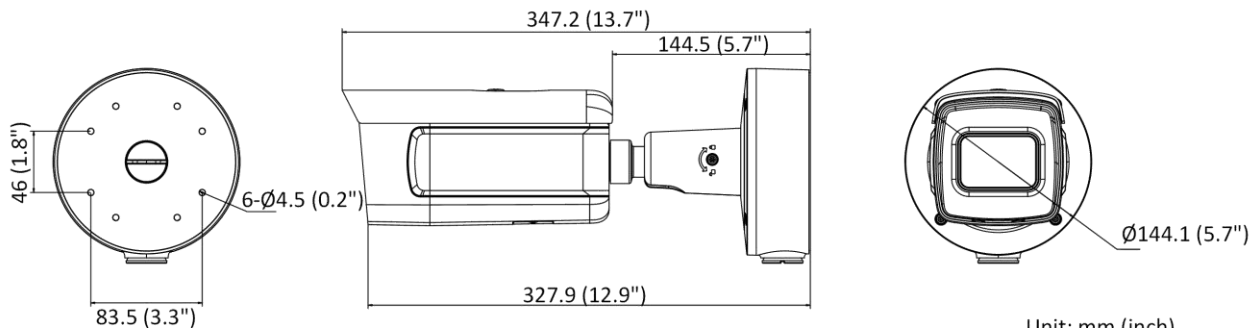
▪ **Dimension**

With -Y model:



Unit: mm (inch)






Without -Y model:



Unit: mm (inch)

▪ **Accessory**

▪ **Optional**

| DS-1475ZJ-Y<br>Vertical Pole<br>Mount   | DS-1475ZJ-SUS<br>Vertical Pole<br>Mount   | DS-2251ZJ<br>Pendant Mount  | DS-1476ZJ-Y<br>Corner Mount   | DS-1476ZJ-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 +66-275-9749  
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 +601-7652-2913  
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