

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



















- 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
- 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

**Face Recognition** 

With embedded deep learning based algorithms, the camera is able to give the best shot of a target face through detecting, tracking, capturing, grading and selecting. The camera captures the face and outputs the features, such as gender, age, and expression. The camera uses face exposure function to dynamically adjust face area exposure of captures and ensures high face picture quality.

**Perimeter Protection** 

With embedded deep learning based target detection and classification algorithms, the camera carries out the duty of perimeter protection, monitoring the actions of line crossing, intrusion, region entrance, and region exiting. The algorithms greatly filter out the mistaken alarm caused by the interference of leafs, lights, animal, flag, etc.

Multi-Target-Type Recognition

With the embedded deep learning algorithms, the camera detects and captures the face, human body, vehicle in the specified region and outputs the features, such as gender, age, top color, and vehicle type.



# Specification

| Camera                      |   |  |  |  |
|-----------------------------|---|--|--|--|
| Image Sensor                | 1/1.8" Progressive Scan CMOS  |  |  |  |
| Max. Resolution             | 2560 × 1440   |  |  |  |
| Min. Illumination           | Color: 0.0005 Lux @ (F1.2, AGC ON); 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   |  |  |  |
|                             | Blue glass module to reduce ghost phenomenon  |  |  |  |
| Lens                        |   |  |  |  |
|                             | 2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal     |  |  |  |
| Focal Longth 9 FOV          | FOV: 141.1° to 48°  |  |  |  |
| Focal Length & FOV          | 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  |  |  |  |
| Aperture                    | 8 to 32 mm: F1.7 to F1.73   |  |  |  |
| Illuminator                 |   |  |  |  |
| Supplement Light Type       | IR  |  |  |  |
| Supplement Light Range      | 2.8 to 12 mm: 50 m  |  |  |  |
| Supplement Light Nange      | 8 to 32 mm: 100 m   |  |  |  |
| Smart Supplement Light      | Yes   |  |  |  |
| IR Wavelength               | 850 nm  |  |  |  |
| Video                       |   |  |  |  |
| Main Stream                 | 50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280× 720)                                       |  |  |  |
| Widin Stream                | 60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280× 720)                                       |  |  |  |
| Sub-Stream                  | 50 Hz: 25 fps (704 × 480, 640 × 480)  |  |  |  |
| Sub Stream                  | 60 Hz: 30 fps (704 × 480, 640 × 480)  |  |  |  |
| Third Stream                | 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)                             |  |  |  |
| Tima Stream                 | 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)                             |  |  |  |
| Fourth Stream               | 50 Hz: 25 fps (704 × 480, 640 × 480)  |  |  |  |
| Tourin sucam                | 60 Hz: 30 fps (704 × 480, 640 × 480)  |  |  |  |
| Fifth Stream                | 50 Hz: 25 fps (704 × 480, 640 × 480)  |  |  |  |
|                             | 60 Hz: 30 fps (704 × 480, 640 × 480)  |  |  |  |
| Video Compression           | H.265+/H.265/H.264+/H.264/MJPEG   |  |  |  |
| Video Bit Rate              | 32 Kbps to 8 Mbps   |  |  |  |
| H.264 Type                  | Baseline Profile/Main Profile/High Profile  |  |  |  |
| H.265 Type                  | Baseline Profile/Main Profile/High Profile  |  |  |  |
| Bit Rate Control            | CBR/VBR   |  |  |  |
| Scalable Video Coding (SVC) | H.264 and H.265 encoding  |  |  |  |
| Region of Interest (ROI)    | 4 fixed regions for main stream, sub-stream, third stream, fourth stream and fifth stream |  |  |  |
| Target Cropping             | Yes   |  |  |  |
|                             |   |  |  |  |



| Audio                       |   |  |  |  |
|-----------------------------|---|--|--|--|
| 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 Type                  | Mono sound  |  |  |  |
| Environment Noise Filtering | Yes   |  |  |  |
| Audio Sampling Rate         | 8 kHz/16 kHz/32 kHz/44.1 kHZ/48 kHz   |  |  |  |
| Audio Compression           | G.711/G.722.1/G.726/MP2L2/PCM/AAC/MP3   |  |  |  |
| Network                     |   |  |  |  |
| Protocols                   | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,             |  |  |  |
| 11000013                    | 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  |  |  |  |
| USEI/HUSI                   | 3 user levels: administrator, operator, and user  |  |  |  |
|                             | Password protection, complicated password, HTTPS encryption, 802.1X authentication        |  |  |  |
|                             | (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest              |  |  |  |
| Security                    | 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   |  |  |  |
|                             | NAS (NFS, SMB/CIFS), auto network replenishment (ANR)                                     |  |  |  |
| Network Storage             | Together with high-end Hikvision memory card, memory card encryption and health           |  |  |  |
|                             | detection are supported.  |  |  |  |
| Client                      | iVMS-4200, Hik-Connect  |  |  |  |
|                             | Plug-in required live view: IE9+, Chrome 41.0 to 44, Firefox 30.0 to 51, Safari 8.0 to 11 |  |  |  |
| Web Browser                 | Plug-in free live view: Chrome 45.0+, Firefox 52.0+                                       |  |  |  |
|                             | Not recommended: Safari 11+, Edge   |  |  |  |
| Image                       |   |  |  |  |
| Image Parameters Switch     | Yes   |  |  |  |
|                             | Saturation, brightness, contrast, sharpness, white balance, and AGC adjustable by         |  |  |  |
| Image Settings              | client software or web browser  |  |  |  |
| Day/Night Switch            | Day, Night, Auto, Schedule, Alarm Trigger   |  |  |  |
| Wide Dynamic Range (WDR)    | 140 dB  |  |  |  |
| Image Enhancement           | BLC, HLC, Defog, 3D DNR   |  |  |  |
| SNR                         | ≥ 52 dB   |  |  |  |
| Privacy Mask                | 8 programmable polygon privacy masks, mask color or mosaic configurable                   |  |  |  |
| Image Stabilization         | EIS   |  |  |  |
| Picture Overlay             | LOGO picture can be overlaid on video with 128 × 128 24bit bmp format                     |  |  |  |
| Interface                   |   |  |  |  |
| 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   |  |  |  |
| •                           |   |  |  |  |



| With -Y: 12 VDC, max. 100 mA   |  |  |
|--|--|--|
|  |  |  |
| Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection  |  |  |
| Line crossing detection, intrusion detection, region entrance detection, region exiting detection, audio exception detection, scene change detection, defocus detection  |  |  |
| Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture  |  |  |
|  |  |  |
| Supports simultaneous detection and capture of human body, face and vehicle Gets 7 face features, 13 human body features and 2 vehicle features  |  |  |
| <ol> <li>Detects up to 60 faces simultaneously</li> <li>Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°</li> <li>Uploads face with background and closed-up face pictures</li> </ol>   |  |  |
| Up to 10 face libraries. Up to 150,000 faces for each library. 150,000 faces in total. Supports face library encryption  |  |  |
| Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)   |  |  |
|  |  |  |
| 12 VDC ± 20%, 1.19 A, max. 14.28 W, three-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V), 0.396 A to 0. 295A, max. 16.8 W  |  |  |
| Aluminum alloy body  |  |  |
| Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7")  |  |  |
| With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")   |  |  |
| 405 × 190 × 180 mm (15.9" × 7.5" × 7.1")   |  |  |
| Approx. 1950 g (4.2 lb.)   |  |  |
| Approx. 3070 g (6.7 lb.)   |  |  |
| -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)  |  |  |
| -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)  |  |  |
| 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 |  |  |
| Heartbeat, mirror, password protection, watermark, privacy mask, IP address filter, one-key reset, five streams  |  |  |
|  |  |  |
| FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN 50130-4: 2011+A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7);   |  |  |
|  |  |  |



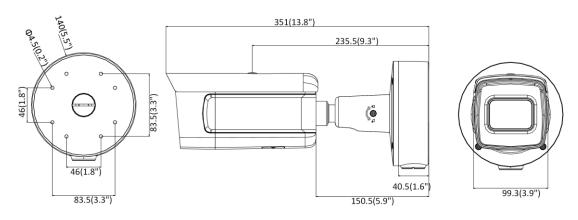
| /                         | UL (UL 62368-1);                               |  |
|---------------------------|--|--|
| Safety                    | CB (IEC 62368-1:2014+A11);                     |  |
|                           | CE-LVD (EN 62368-1:2014/A11:2017);             |  |
|                           | BIS (IS 13252(Part 1):2010/ IEC 60950-1:2005); |  |
|                           | LOA (IEC/EN 60950-1)                           |  |
| Environment               | CE-RoHS (2011/65/EU);                          |  |
|                           | WEEE (2012/19/EU);                             |  |
|                           | 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

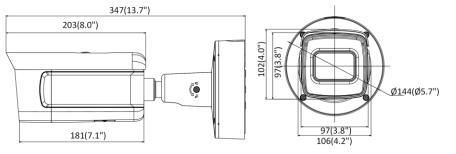
iDS-2CD7A46G0-IZHSY (2.8 to 12 mm, 8 to 32 mm) iDS-2CD7A46G0-IZHS (2.8 to 12 mm, 8 to 32 mm)

## Dimension

-Y model:



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-1476ZJ-Y<br>Corner Mount | DS-1476ZJ-SUS<br>Corner Mount |
|---------------------------------------|---|-----------------------------|-------------------------------|
|                                       |   |                             |                               |

Distributed by

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