

iDS-2CD7146G0-IZ(H)S(Y)(D) 4 MP IR Varifocal Dome Network Camera

DarkFighter ✦



▪ DeepinView^{series}

- 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 Detection

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), B/W: 0 Lux with IR |
| Shutter Time | 1 s to 1/100,000 s |
| Day & Night | IR cut filter |
| Angle Adjustment | Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355° |
| Lens | |
| Focal Length & FOV | 2.8 to 12 mm, horizontal FOV 107.4° to 39.8°, vertical FOV 56° to 22.4°, diagonal FOV 130.1° to 45.7° 8 to 32 mm, horizontal FOV 42.5° to 14°, vertical FOV 23.4° to 8°, diagonal FOV 49.7° to 17° |
| Focus | Auto, Semi-auto, Manual |
| Iris Type | P-iris |
| Aperture | 2.8 to 12 mm: F1.2, 8 to 32 mm: F1.6 |
| DORI | |
| DORI | 2.8 to 12 mm: D: 149.0 m, O: 59.1 m, R: 29.8 m, I: 14.9 m 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: Monitoring: 40 m; 8 to 32 mm: Monitoring: 60 m |
| Smart Supplement Light | Yes |
| IR Wavelength | 850 nm |
| Video | |
| Main Stream | 50 Hz: 50 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 60 fps (2560 × 1440, 1920 × 1080, 1280 × 720) |
| Sub-Stream | 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) |
| Third Stream | 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480) |
| Fourth Stream | 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) |
| Fifth Stream | 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) |
| Video Compression | Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG, Fifth stream: H.265/H.264/MJPEG |
| Video Bit Rate | 32 Kbps to 8 Mbps |

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|-----------------------------|--|
| 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 region(s) for each stream |
| Target Cropping | Yes |
| e-PTZ | Support Preset, Patrol, and Auto Tracking settings |
| Audio | |
| Audio Type | Mono sound |
| 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/44.1 kHz/48 kHz |
| Environment Noise Filtering | Yes |
| Network | |
| 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, SFTP, SRTP |
| Simultaneous Live View | Up to 20 channels |
| API | Open Network Video Interface (Profile S, Profile G, Profile T),ISAPI,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 |
| Client | iVMS-4200,Hik-Connect |
| Web Browser | Plug-in required live view: IE10, IE11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Not recommended: Chrome 57.0+, Firefox 52.0+, Safari12+ |
| Network Storage | NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR), Together with high-end Hikvision memory card, memory card encryption and health detection are supported. |
| Image | |
| Image Parameters Switch | Yes |
| Image Settings | Saturation, brightness, contrast, sharpness, AGC, white balance, adjustable by client software or web browser |
| Day/Night Switch | Day, Night, Auto, Schedule, Alarm Trigger |
| Wide Dynamic Range (WDR) | 140 dB |
| Image Enhancement | BLC, HLC, 3D DNR, Defog, EIS |
| Privacy Mask | 8 programmable polygon privacy masks, mask color or mosaic configurable |
| Picture Overlay | LOGO picture can be overlaid on video with 128 × 128 24 bit 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 |

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|-------------------------------|---|
| On-Board Storage | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB |
| Built-in Microphone | Yes, 2 built-in microphone(s) |
| Built-in Speaker | Max. power consumption: 1.5 W, max. sound pressure level: 98 dB, speaker range: 10 m |
| Audio | 1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp, input impedance: 4.7 K Ω , interface type: non-equilibrium, 1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω , interface type: non-equilibrium, mono sound |
| Alarm | 2 input(s), 2 output(s) (max. 24 VDC/24 VAC, 1 A) |
| RS-485 | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive) |
| Reset Key | Yes |
| Power Output | 12 VDC, max. 100 mA |
| Event | |
| Basic Event | Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, network disconnected, IP address conflict, illegal login, HDD full, HDD error, video quality diagnosis, vibration detection |
| Smart Event | Line crossing detection, intrusion detection, region entrance detection, region exiting detection (support alarm triggered by specified target types (human and vehicle)), scene change detection, audio exception detection, defocus detection |
| Linkage | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture |
| Deep Learning Function | |
| Multi-target-type Detection | Supports simultaneous detection and capture of human body, face, and vehicle, Gets 7 face features, Gets 13 human body features, Gets 2 vehicle features |
| Face Capture | Detects up to 60 faces simultaneously, Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°, Uploads face with background and closed-up face pictures |
| Face Comparison | Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total. , Face comparison speed up to 60 per frame., Recognizes face identity via face modeling, grading and comparing to those in face library, Supports face library encryption |
| Metadata | Intrusion detection, line crossing detection, region entrance detection, region exiting detection, face capture |
| General | |
| Power | 12 VDC \pm 25%, 0.97 A, max. 11.43 W, three-core terminal block, reverse polarity protection, 24 VAC \pm 25%, 0.73 A, max. 10.67 W, PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.19 A to 0.28 A, max. 11.92 W |
| Material | Base: metal, cover: metal |
| Dimension | \varnothing 144.3 mm \times 114.1 mm (\varnothing 5.7" \times 4.5") |
| Package Dimension | 244 mm \times 174 mm \times 173 mm (9.6" \times 6.9" \times 6.8") |
| Weight | Approx. 990 g (2.0 lb.) |
| With Package Weight | Approx. 1425 g (3.1 lb.) |

| | |
|----------------------------------|---|
| Storage Conditions | -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing) |
| Startup and Operating Conditions | -30 °C to 60 °C (-22 °F to 140 °F). With heater model (-H): -40 °C to 60 °C (-40 °F to 140 °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, one-key reset, mirror, password protection, watermark |
| Cable Length | 0.25 m (0.8 ft.) |
| Approval | |
| EMC | FCC: 47 CFR Part 15, Subpart B, CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014, EN50121-4 RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: 2015 |
| Safety | UL: UL 62368-1, 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 | IP67: IEC 60529-2013,IK10: IEC 62262:2002 |
| Anti-Corrosion Protection | -Y: NEMA 4X (NEMA 250-2018) |
| Other | PVC FREE |

▪ Available Model

iDS-2CD7146G0-IZS (D) (2.8 to 12 mm, 8 to 32 mm)

iDS-2CD7146G0-IZHSY (D) (2.8 to 12 mm, 8 to 32 mm)

▪ Typical Application

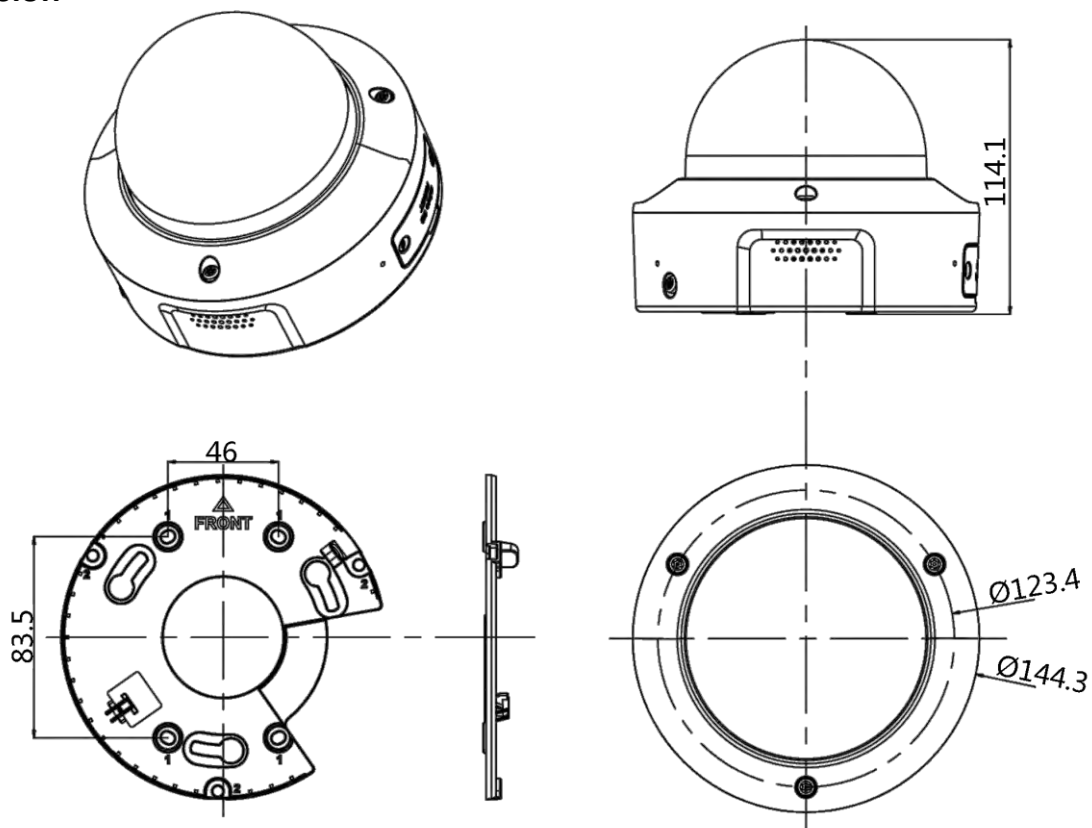
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

-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



Unit: mm

- Accessory
- Optional

| | | | | |
|---|---|---|---|---|
| DS-1273ZJ-160 Wall Mount | DS-1476ZJ-Y Corner Mount | DS-1227ZJ-DM32 In-Ceiling Mount | DS-1475ZJ-SUS Vertical Pole Mount | DS-1476ZJ-SUS Corner Mount |
|  |  |  |  |  |
| DS-1475ZJ-Y Vertical Pole Mount | DS-1271Z-160 Pendant Mount | DS-1273ZJ-160-AKS Wall Mount | | |
|  |  |  | | |

*Bracket model with -Y or -AKS supports anti-corrosion protection.

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