

## iDS-2CD7046G2-AP(/F11) 4MP DeepinView Varifocal Box Camera

DeepinView<sup>series</sup>



Hikvision has been dedicated to develop products with security since established. Hikvision always follows security by design principle and has adopted many methods of security technologies into our product development lifecycle, including terminal security, data security, application security, network security, and privacy protection. In the meantime, the security technologies used by Hikvision are all in compliance with local applicable laws and safety regulations. These security measures could enhance product's cyber security protection capability and protect your devices as well as your data from malicious cyber attacks.

- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter 2.0 technology
- Clear imaging against strong back light due to 150 dB AWDR technology
- Efficient H.265+ compression technology to save bandwidth and storage
- 5 streams to meet a wide variety of applications
- Built-in microphone for real-time audio security
- Capture vehicles and humans of different speed clearly via ShotN technology
- High frame rate, up to 2MP@120fps and 4MP@60fps
- Built-in G-sensor for vibration detection
- Built-in power meter for voltage exception alarm and historical power statistics

## ▪ Function

### Face Capture

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

### Multi-Target-Type Detection

With the embedded deep learning algorithms, the camera detects and captures the face, human body, vehicle in the specified region.

## ▪ Specification

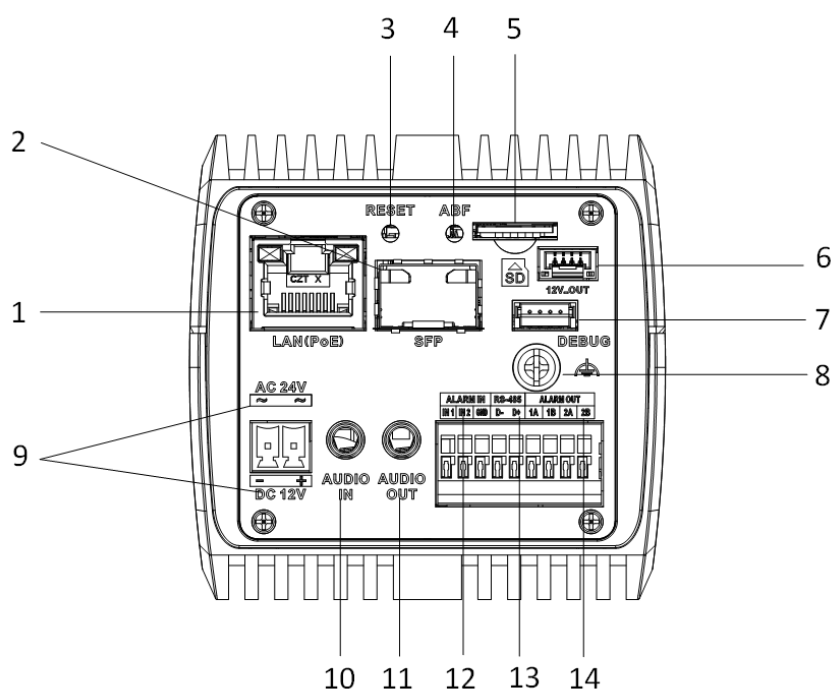
| Camera                      |                                                                                                                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor                | 1/1.8" Progressive Scan CMOS                                                                                                                                                    |
| Max. Resolution             | 2688 × 1520                                                                                                                                                                     |
| Min. Illumination           | Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON)                                                                                                            |
| Shutter Time                | 1 s to 1/100,000 s                                                                                                                                                              |
| Day & Night                 | IR cut filter, Blue glass module (less ghost phenomenon)                                                                                                                        |
| Lens                        |                                                                                                                                                                                 |
| Lens Mount                  | CS mount                                                                                                                                                                        |
| Video                       |                                                                                                                                                                                 |
| Main Stream                 | 50 Hz:<br>100 fps (1920 × 1080)<br>50 fps (2688 × 1520, 2560 × 1440, 1280 × 720)<br>60 Hz:<br>120 fps (1920 × 1080)<br>60 fps (2688 × 1520, 2560 × 1440, 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 (704 × 576, 640 × 480)<br>60 Hz: 30 fps (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: H.265/H.264/MJPEG,<br>Third stream: H.265/H.264,<br>Fourth stream: H.265/H.264/MJPEG,<br>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.264 and H.265 encoding                                                                                                                                                        |
| Region of Interest (ROI)    | 4 fixed regions for each stream                                                                                                                                                 |
| Target Cropping             | Yes                                                                                                                                                                             |
| e-PTZ                       | Support 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/48 kHz                                                                                                                                                      |
| Environment Noise Filtering | Yes                                                                                                                                                                             |

| Network                  |                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocols                | TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, SRTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, WebSocket, WebSockets                                                                                                                                                                                                                      |
| Simultaneous Live View   | Up to 20 channels                                                                                                                                                                                                                                                                                                                                                                             |
| API                      | ISAPI, SDK, ISUP, OTAP, ONVIF (Profile S, Profile G, Profile T, Profile M)                                                                                                                                                                                                                                                                                                                    |
| 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, TLS 1.3, TPM 2.0 (FIPS 140-2 level 2), AES128/256 |
| Client                   | iVMS-4200, Hik-Connect, Hik-Central                                                                                                                                                                                                                                                                                                                                                           |
| 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.                                                                                                                                                                                                                               |
| 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+                                                                                                                                                                                                               |
| Image                    |                                                                                                                                                                                                                                                                                                                                                                                               |
| Image Parameters Switch  | Yes                                                                                                                                                                                                                                                                                                                                                                                           |
| Image Settings           | Rotate mode, 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) | 150 dB                                                                                                                                                                                                                                                                                                                                                                                        |
| Image Enhancement        | BLC, HLC, 3D DNR, Distortion Correction, Defog                                                                                                                                                                                                                                                                                                                                                |
| SNR                      | ≥ 52 dB                                                                                                                                                                                                                                                                                                                                                                                       |
| Privacy Mask             | 8 programmable polygon privacy masks                                                                                                                                                                                                                                                                                                                                                          |
| 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                                                                                                                                                                                                                                                                                                                                          |
| On-Board Storage         | Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB                                                                                                                                                                                                                                                                                                               |
| Built-in Microphone      | Yes, 1 built-in microphone                                                                                                                                                                                                                                                                                                                                                                    |
| Audio                    | 1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium,<br>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 inputs, 2 outputs (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,exception (network disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD error)                                                                                                                                                                                     |
| Smart Event                      | 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,audible warning                                                                                                                                                                                                                                                                      |
| Deep Learning Function           |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Multi-target-type Detection      | Supports simultaneous detection and capture of human body, face, and vehicle,<br>Gets 7 face features,<br>Gets 13 human body features,<br>Gets 2 vehicle features,<br>Supports counting the number of line crossing targets by type, including human body, non-motor vehicle, motor vehicle,<br>Supports dynamic mosaic mask                                                                                    |
| Face Capture                     | Detects up to 120 faces simultaneously, captures up to 40 face pictures per frame simultaneously and uploads up to 10 face pictures per second,<br>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,<br>Supports best shot and quick shot for capture mode,<br>Supports dynamic mosaic mask,<br>Gets 7 face features |
| Face Comparison                  | Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total,<br>Supports face library encryption                                                                                                                                                                                                                                                                                             |
| Perimeter Protection             | Line crossing, intrusion, region entrance, region exiting<br>Support alarm triggering by specified target types (human and vehicle)<br>Support combined event alarm triggering                                                                                                                                                                                                                                  |
| General                          |                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Power                            | 12 VDC $\pm$ 20%, 0.8 A, max. 9.6 W,three-core terminal block,reverse polarity protection, 24 VAC $\pm$ 20%, 0.64 A, max. 9.2 W,<br>PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.25 A to 0.19 A, max. 10.4 W                                                                                                                                                                                           |
| Material                         | Aluminum alloy body                                                                                                                                                                                                                                                                                                                                                                                             |
| Dimension                        | 142.5 mm $\times$ 69.8 mm $\times$ 68 mm (5.61" $\times$ 2.75" $\times$ 2.68")                                                                                                                                                                                                                                                                                                                                  |
| Package Dimension                | 315 mm $\times$ 140 mm $\times$ 140 mm (12.4" $\times$ 5.51" $\times$ 5.51")                                                                                                                                                                                                                                                                                                                                    |
| Weight                           | Approx. 765 g (1.69 lb.)                                                                                                                                                                                                                                                                                                                                                                                        |
| With Package Weight              | Approx. 1150 g (2.54 lb.)                                                                                                                                                                                                                                                                                                                                                                                       |
| Storage Conditions               | -30 °C to 65 °C (-22 °F to 149 °F). Humidity 95% or less (non-condensing)                                                                                                                                                                                                                                                                                                                                       |
| Startup and Operating Conditions | -30 °C to 65 °C (-22 °F to 149 °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,pixel counter,anti-banding                                                                                                                                                                                                                                                                                                                                   |
| Device Management                | Supports adding alarm box (DS-FM2466) in the LAN to expand 6 additional input and 6 output alarm interfaces                                                                                                                                                                                                                                                                                                     |

| 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, RCM: AS/NZS CISPR 32: 2015, IC: ICES-003: Issue 7, KC: KN32: 2015, KN35: 2015 |
| 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                                                                                                                              |
| Automotive and Railway | EN50121-4                                                                                                                                                                                               |
| Other                  | PVC FREE                                                                                                                                                                                                |

## Physical Interface



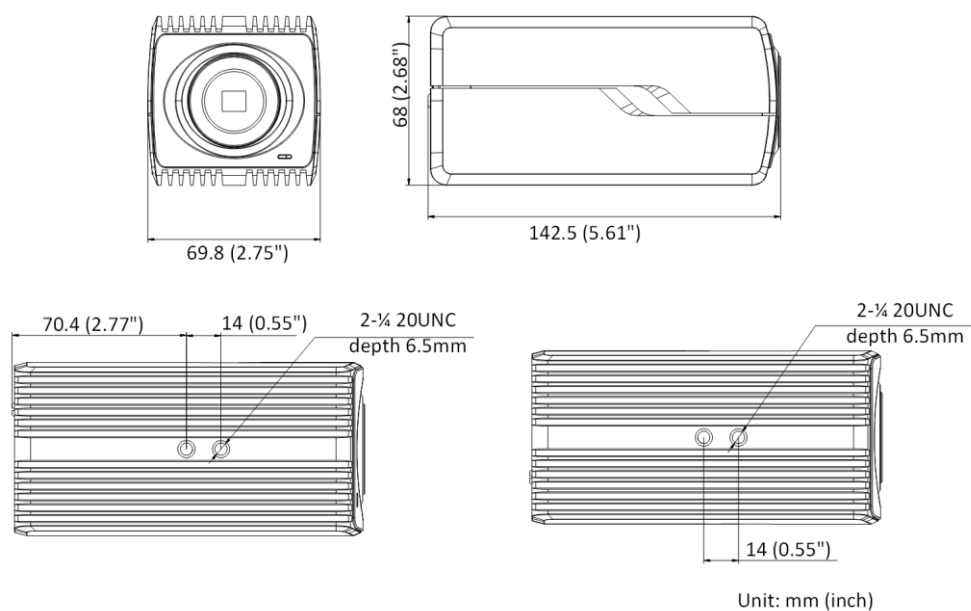
| No. | Description       | No. | Description     |
|-----|-------------------|-----|-----------------|
| 1   | LAN (PoE)         | 8   | GROUND          |
| 2   | SFP               | 9   | AC 24 V/DC 12 V |
| 3   | RESET Button      | 10  | AUDIO IN        |
| 4   | ABF               | 11  | AUDIO OUT       |
| 5   | MicroSD Card Slot | 12  | ALARM IN        |
| 6   | DC 12 V OUT       | 13  | RS-485          |
| 7   | DEBUG             | 14  | ALARM OUT       |

\*Note: The interface varies depending on the model. Please refer to the actual product.

## ▪ Available Model

iDS-2CD7046G2-AP

## ▪ Dimension



▪ **Accessory**

▪ **Optional**

| DS-1292ZJ<br>Wall mount                                                             | DS-1293ZJ<br>Wall mount                                                             | DS-1299ZJ<br>Pendant Mount                                                          | DS-1269ZJ<br>Pendant Mount                                                            | DS-1214ZJ<br>Horizontal pole<br>mount                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|    |    |    |    |    |
| DS-1233ZJ<br>Pendant Mount                                                          | DS-1332HZ<br>Indoor Housing                                                         | DS-1331HZ-W<br>Outdoor Housing                                                      | HV3816P-8MPIR<br>Mega-pixel P-Iris<br>Lens                                            | HV1140P-8MPIR<br>Mega-pixel P-Iris<br>Lens                                            |
|   |   |   |   |   |
| HV3816D-8MPIR<br>Mega-pixel<br>Auto-Iris Lens                                       | HV1140D-8MPIR<br>Mega-pixel<br>Auto-Iris Lens                                       | HV0733D-6MP<br>Mega-pixel<br>Auto-Iris Lens                                         | HV0415D-MP<br>Mega-pixel<br>Auto-Iris Lens                                            | DS-2202ZJ<br>Wall mount                                                               |
|  |  |  |  |  |

**Headquarters**

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



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