

## iDS-2CD8A86G0-XZ(H)S(Y) 8 MP DeepinView Multi-sensor Bullet Camera

**DarkFighter**



### ▪ DeepinView<sup>series</sup>

- High quality imaging with 8 MP resolution in channel 1 and 4 MP resolution in channel 2
- Adopt dual-channel design so you can get details in channel 1 and panorama view in channel 2
- Excellent low-light performance via DarkFighter and ColorVu 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 leaves, 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.

### 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           | Channel 1: 1/1.2" Progressive Scan CMOS,<br>Channel 2: 1/1.8" Progressive Scan CMOS                                                                                                                                                                                                                          |
| Max. Resolution        | Channel 1: 3840 × 2160, channel 2: 2560 × 1440                                                                                                                                                                                                                                                               |
| Min. Illumination      | Channel 1: Color: 0.0003 Lux @ (F1.2, AGC ON), 0 Lux with Light, B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR,<br>Channel 2: Color: 0.0003 Lux @ (F1.0, AGC ON), 0 Lux with Light B/W: 0.0001 Lux @ (F1.0, AGC ON), 0 Lux with IR                                                                         |
| Shutter Time           | 1 s to 1/100000 s                                                                                                                                                                                                                                                                                            |
| Day & Night            | IR cut filter,<br>Blue glass module (less ghost phenomenon)                                                                                                                                                                                                                                                  |
| Angle Adjustment       | Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°                                                                                                                                                                                                                                                         |
| Lens                   |                                                                                                                                                                                                                                                                                                              |
| Focal Length & FOV     | Channel 1: 10 to 50 mm: horizontal FOV 36° to 13.1°, vertical FOV: 20.4° to 7.4°,<br>diagonal FOV 41.8° to 14.9°<br>Channel 2: 4 mm: horizontal FOV: 89°, vertical FOV: 45°, diagonal FOV: 107°                                                                                                              |
| Focus                  | Channel 1: Auto, semi-auto, manual                                                                                                                                                                                                                                                                           |
| Iris Type              | Channel 1: P-iris,<br>Channel 2: Fixed                                                                                                                                                                                                                                                                       |
| Aperture               | Channel 1: Constant F1.6 throughout the zoom range,<br>Channel 2: F1.0                                                                                                                                                                                                                                       |
| DORI                   |                                                                                                                                                                                                                                                                                                              |
| DORI                   | Channel 1:<br>Wide: D:241.4 m, O: 95.8 m, R: 48.3 m, I: 24.1 m<br>Tele: D: 620.7 m, O: 246.3 m, R:124.1 m, I: 62.1 m<br>Channel 2:<br>D:77 m, O: 30.5 m, R: 15.4 m, I: 7.7 m                                                                                                                                 |
| Illuminator            |                                                                                                                                                                                                                                                                                                              |
| Supplement Light Type  | Hybrid (IR and White Light)                                                                                                                                                                                                                                                                                  |
| Supplement Light Range | Channel 1: up to 120 m,<br>Channel 2: up to 30 m                                                                                                                                                                                                                                                             |
| Smart Supplement Light | Yes                                                                                                                                                                                                                                                                                                          |
| IR Wavelength          | 850 nm                                                                                                                                                                                                                                                                                                       |
| Video                  |                                                                                                                                                                                                                                                                                                              |
| Main Stream            | Channel 1:<br>50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>60 Hz: 24 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>Channel 2:<br>50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 720)<br>60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 720) |

|                             |                                                                                                                                                                                                                                                                                              |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sub-Stream                  | Channel 1:<br>50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 24 fps (704 × 480, 640 × 480)<br>Channel 2:<br>50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 30 fps (704 × 480, 640 × 480)                                                                                                     |
| Third Stream                | Channel 1:<br>50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60 Hz: 24 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)<br>Channel 2:<br>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               | Channel 1:<br>50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)<br>60 Hz: 24 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)<br>Channel 2:<br>50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 30 fps (704 × 480, 640 × 480)                                                   |
| Fifth Stream                | Channel 1:<br>50 Hz: 25 fps (704 × 576, 640 × 480)<br>60 Hz: 24 fps (704 × 480, 640 × 480)<br>Channel 2:<br>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 16 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 region(s) for each stream                                                                                                                                                                                                                                                            |
| Target Cropping             | Yes                                                                                                                                                                                                                                                                                          |
| <b>Audio</b>                |                                                                                                                                                                                                                                                                                              |
| 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, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4/IPv6, UDP, Bonjour, SSL/TLS, WebSocket, WebSockets                                                                                                                                                                    |
| 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<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 |
| 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.                                                                                                                                                                                      |
| Client                   | iVMS-4200,Hik-Connect                                                                                                                                                                                                                                                                                                                               |
| Web Browser              | Plug-in required live view: IE 10, IE11,<br>Plug-in free live view: Chrome 57.0+, Firefox 52.0+                                                                                                                                                                                                                                                     |
| Image                    |                                                                                                                                                                                                                                                                                                                                                     |
| Image Parameters Switch  | Yes                                                                                                                                                                                                                                                                                                                                                 |
| Image Settings           | Saturation,brightness,contrast,sharpness,AGC,white balance,adjustable by client software or web browser                                                                                                                                                                                                                                             |
| Day/Night Switch         | Channel 1: Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger,<br>Channel 2: Day, Night, Auto, Schedule, Alarm Trigger                                                                                                                                                                                                                        |
| Wide Dynamic Range (WDR) | 140 dB                                                                                                                                                                                                                                                                                                                                              |
| Image Enhancement        | Channel 1: BLC, HLC, 3D DNR, Defog, EIS,<br>Channel 2: BLC, HLC, 3D DNR, Defog                                                                                                                                                                                                                                                                      |
| 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 256 GB                                                                                                                                                                                                                                                                   |
| 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 input(s), 2 output(s) (max. 24 VDC, 1 A)                                                                                                                                                                                                                                                                                                          |
| RS-485                   | 1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)                                                                                                                                                                                                                                                                                  |
| Reset Key                | Yes                                                                                                                                                                                                                                                                                                                                                 |
| Power Output             | 12 VDC, max. 50 mA                                                                                                                                                                                                                                                                                                                                  |
| Event                    |                                                                                                                                                                                                                                                                                                                                                     |
| Basic Event              | Motion detection, 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, white light flashing                                                                                                                                                                                                 |
| <b>Deep Learning Function</b>      |                                                                                                                                                                                                                                                                                                                                                       |
| Multi-target-type Detection        | Channel 1,<br>Detects up to 60 targets simultaneously,<br>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                                                                                                                            |
| Face Capture                       | Channel 1,<br>Detects up to 120 faces simultaneously,<br>Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°,<br>Uploads face with background and closed-up face pictures                                                                                                                                               |
| Face Comparison                    | Channel 1,<br>Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total. ,<br>Recognizes face identity via face modeling, grading and comparing to those in face library,<br>Supports face library encryption                                                                                                                    |
| Road Traffic and Vehicle Detection | Channel 1,<br>Blocklist and allowlist: up to 10,000 records<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.)<br>License plate recognition rate ≥98%                                            |
| <b>General</b>                     |                                                                                                                                                                                                                                                                                                                                                       |
| Power                              | Three-core terminal block,<br>12 VDC ± 20%, 1.90 A, max. 22.7 W,<br>24 VAC ± 20%, 1.39 A, max. 22.3 W,<br>PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.59 A to 0.44 A, max. 24.7 W                                                                                                                                                                |
| Material                           | Aluminum alloy body                                                                                                                                                                                                                                                                                                                                   |
| Dimension                          | Ø140 mm × 409.7 mm (Ø5.5" × 16.1")                                                                                                                                                                                                                                                                                                                    |
| Package Dimension                  | 462 mm × 197 mm × 195 mm (18.2" × 7.76" × 7.68")                                                                                                                                                                                                                                                                                                      |
| Weight                             | Approx. 2.2 kg (4.85 lb.)                                                                                                                                                                                                                                                                                                                             |
| With Package Weight                | Approx. 3.38 kg (7.45 lb.)                                                                                                                                                                                                                                                                                                                            |
| Startup and Operating Conditions   | With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing),<br>Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)                                                                                                                                                                          |
| General Function                   | Heartbeat, one-key reset, mirror, password protection, privacy mask, watermark, IP address filter, flash log, conreol time out, anti-banding                                                                                                                                                                                                          |
| 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 |
| Heater                             | Yes                                                                                                                                                                                                                                                                                                                                                   |

|                           |                                                                                                                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage Conditions        | -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)                                                                                                                                                    |
| Demist                    | Yes                                                                                                                                                                                                                          |
| <b>Approval</b>           |                                                                                                                                                                                                                              |
| EMC                       | FCC: 47 CFR Part 15, Subpart B,<br>CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 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: KN32: 2015, KN35: 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                | IP67: IEC 60529-2013, IK10: IEC 62262:2002                                                                                                                                                                                   |
| Anti-Corrosion Protection | -Y model: NEMA 4X (NEMA 250-2018)                                                                                                                                                                                            |
| Automotive and Railway    | EN50121-4                                                                                                                                                                                                                    |
| Other                     | PVC FREE                                                                                                                                                                                                                     |

### ▪ Available Model

iDS-2CD8A86G0-XZHSY(1050/4)

iDS-2CD8A86G0-XZS(1050/4)

### ▪ Typical Application

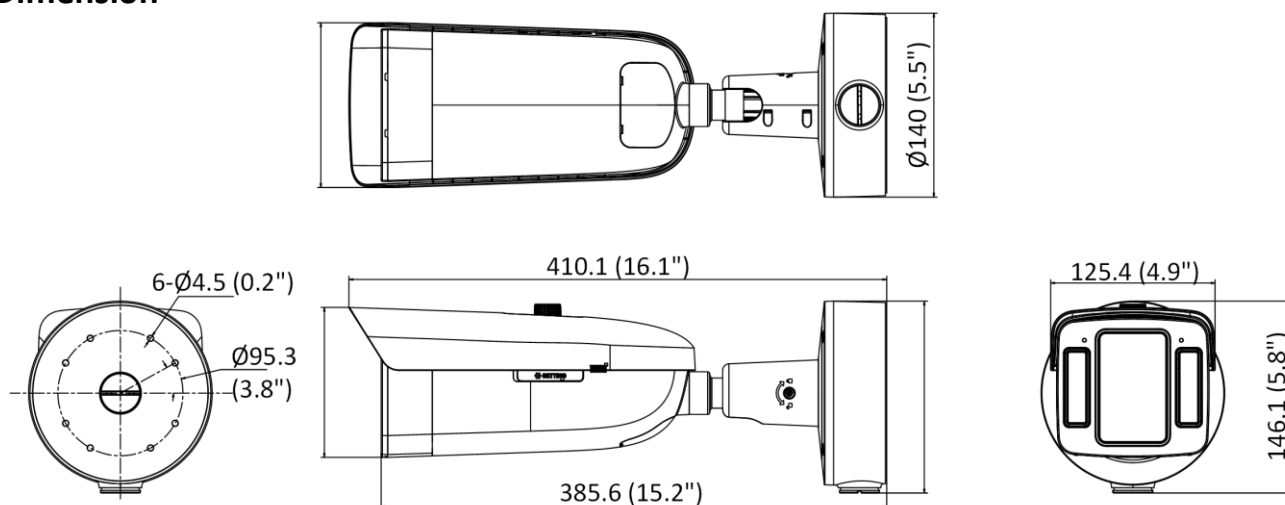
Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

With -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 (inch)

## ▪ Accessory

### ▪ Optional

| DS-1275ZJ-S-SUS<br>Vertical Pole<br>Mount                                           | DS-1476ZJ-SUS<br>Corner Mount                                                       | DS-1475ZJ-SUS<br>Vertical Pole<br>Mount                                             | DS-1476ZJ-Y<br>Corner Mount                                                           | DS-1475ZJ-Y<br>Vertical Pole<br>Mount                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |

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