

# iDS-2CD7546G2-XZHS(Y) 4MP DeepinView PTRZ Moto Varifocal Dome Camera

## **DeepinView**

















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
- Water and dust resistant (IP67), vandal proof (IK10) and corrosion resistant (NEMA 4X, optional)
- 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 historical power statistics
- Unique PTRZ capability for efficient installation and configuration



#### 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.

#### 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.

#### Queue Management

With embedded deep learning based algorithms, the camera detects queuing-up people number and waiting time of each person. It can generate reports to compare the efficiency of different queuing-ups and display the changing status of one queue, and supports raw data export for further analysis.

#### Regional People Counting

With the embedded deep learning algorithms, the camera supports people density detection and will upload detection data through scheduled uploading, number of people change uploading and congestion level uploading. It also supports number of people exception detection and waiting time exception detection.

#### On/Off Duty Detection

With the embedded deep learning algorithms, the camera supports absence detection and on/off duty detection. It can detect the on/off duty status and people number changes in a predefined area.

#### Heat Map

The camera can generate a graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area.

#### Multi-Dimension People Counting

With the embedded deep learning algorithms, the camera integrates multiple intelligences. It counts persons and compares them with the built-in face picture library to remove duplicates. It counts persons and reports an alarm simultaneously to achieve both the entrance control and people counting.

#### Hard Hat Detection

With the embedded deep learning algorithms, the camera detects the persons in the specified region. It detects whether the person is wearing a hard hat, and reports an alarmif not.



# 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),B/W: 0 Lux with IR   |  |  |  |
| Shutter Time           | 1 s to 1/100,000 s   |  |  |  |
| Day & Night            | IR cut filter, Blue glass module (less ghost phenomenon)   |  |  |  |
| Angle Adjustment       | Pan: 0° to 355°,tilt: 0° to 85°,rotate: 0° to 355°   |  |  |  |
| Lens                   |  |  |  |  |
| Lens Type              | Varifocal lens, motorized lens, 2.8 to 12 mm and 8 to 32 mm optional   |  |  |  |
| Focal Length & FOV     | 2.8 to 12 mm, horizontal FOV 114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FO 141.3° to 48.1°  8 to 32 mm, horizontal FOV 42.5° to 15.2°, vertical FOV 23.4° to 8.7°, diagonal FOV 49.7° to 17.3°   |  |  |  |
| Focus                  | Auto,Semi-auto,Manual  |  |  |  |
| Iris Type              | P-iris   |  |  |  |
| Aperture               | 2.8 to 12 mm: F1.47 to F2.53, 8 to 32 mm: F1.7 to F1.73  |  |  |  |
| DORI                   |  |  |  |  |
| DORI                   | D (Detect): 151.7 m, O (Observe): 60.2 m, R (Recognize): 30.3 m, I (Identify): 15.2 m 8 to 32 mm:  D (Detect): 400 m, O (Observe): 158.7 m, R (Recognize): 80 m, I (Identify): 40 m  The DORI values are calculated using pixel densities for different use cases as recommended by the EN 62676-4 standard.   |  |  |  |
| Illuminator            |  |  |  |  |
| Supplement Light Type  | IR,White Light   |  |  |  |
| 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   |  |  |  |
| Al Open Platform       |  |  |  |  |
| Model Specification    | Up to 4 models,  Model type: detection model, classification model, mixed model (detection model and classification model)   |  |  |  |
| Video                  |  |  |  |  |
| Main Stream            | Monitoring mode:  50 Hz: up to 50 fps (2688 × 1520, 1280 × 720), up to 100 fps (1920 × 1080)  60 Hz: up to 60 fps (2688 × 1520, 1280 × 720), up to 120 fps (1920 × 1080)  *High frame rate is supported under monitoring mode only.  smart mode:  50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)  60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) |  |  |  |
| Sub-Stream             | 50 Hz: 25 fps (1280 × 720, 704 × 576, 640 × 480)<br>60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)   |  |  |  |



|                             | 504 255 (4020 4020 4020 704 575 540 400)  |  |  |  |
|-----------------------------|---|--|--|--|
| 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)<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)          |  |  |  |
|                             | Main stream: H.265+/H.265/H.264+/H.264,   |  |  |  |
|                             |   |  |  |  |
| Vi des Communes en          | Sub-stream: H.265/H.264/MJPEG,  |  |  |  |
| Video Compression           | Third stream: H.265/H.264,  |  |  |  |
|                             | Fourth stream: H.265/H.264/MJPEG,   |  |  |  |
| Middle Bit Bata             | 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      |  |  |  |
| Addio bit Nate              | (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                     |   |  |  |  |
|                             | TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, SRTP, RTP, RTSP, RTCP,       |  |  |  |
| Protocols                   | PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour,          |  |  |  |
|                             | SSL/TLS, ARP, WebSocket, WebSockets   |  |  |  |
| Simultaneous Live View      | Up to 20 channels   |  |  |  |
| API                         | ISAPI,SDK,ISUP,OTAP,ONVIF (ProfileS, ProfileG, ProfileT, ProfileM)                  |  |  |  |
| User/Host                   | Up to 32 users  |  |  |  |
| USEI/1103C                  | 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, TLS 1.3, TPM 2.0 (FIPS 140-2 level 2), AES128/256                          |  |  |  |
|                             | 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,Hik-Central   |  |  |  |
|                             | Plug-in required live view: IE 10, IE 11,   |  |  |  |
| Web Browser                 | Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+,          |  |  |  |
|                             | Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+                                |  |  |  |



| Image                       |  |  |  |  |
|-----------------------------|--|--|--|--|
| Image Parameters Switch     | Yes  |  |  |  |
| Image Settings              | Rotate mode, saturation, brightness, contrast, sharpness, white balance, AGC, adjustable |  |  |  |
|                             | by clients of tware 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.                  |  |  |  |
| Image Stabilization         | EIS  |  |  |  |
| 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          |  |  |  |
| Alarm                       | 2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)  |  |  |  |
| Built-in Microphone         | 2 built-in microphones   |  |  |  |
|                             | 1 input (linein), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp,        |  |  |  |
| A                           | input impedance: 4.7 K $\Omega$ , interface type: non-equilibrium,                       |  |  |  |
| Audio                       | 1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp,    |  |  |  |
|                             | output impedance: $100\Omega$ , interface type: non-equilibrium, mono sound              |  |  |  |
| Built-in Speaker            | 1 built-in speaker   |  |  |  |
| 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                       |  |  |  |  |
|                             | Motion detection (support alarm triggering by specified target types (human and          |  |  |  |
| Basic Event                 | vehicle)), video tampering alarm, video quality diagnosis, exception (network            |  |  |  |
| Dasic Event                 | disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD        |  |  |  |
|                             | error),vibration detection   |  |  |  |
| Smart Event                 | scene change detection, audio exception detection, defocus detection                     |  |  |  |
| Linkage                     | Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm     |  |  |  |
| Lilikage                    | output,trigger recording,trigger capture,audible warning                                 |  |  |  |
| Deep Learning Function      |  |  |  |  |
|                             | Supports simultaneous detection and capture of human body, face, and vehicle,            |  |  |  |
|                             | Gets 7 face features,  |  |  |  |
|                             | Gets 13 human body features,   |  |  |  |
| Multi-target-type Detection | Gets 2 vehicle features,   |  |  |  |
|                             | Supports counting the number of line crossing targets by type, including human body,     |  |  |  |
|                             | non-motor vehicle, motor vehicle,  |  |  |  |
|                             | Supports dynamic mosaic mask   |  |  |  |



|                      | Detects up to 120 faces simultaneously, captures up to 40 face pictures per frame       |
|----------------------|---|
| Face Capture         | simultaneously and uploads up to 10 face pictures per second,                           |
|                      | 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,                               |
|                      | Supports best shot and quick shot for capture mode,                                     |
|                      | Supports dynamic mosaic mask,   |
|                      | Gets 7 face features  |
|                      | Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total,         |
| Face Comparison      | Supports facelibrary encryption   |
|                      | Supports Multi-Dimension People Counting,   |
|                      | Supports counting, displaying and exporting the people flow data of entering, exiting   |
|                      | and passing by (The data is stored in the flash.),                                      |
|                      | Supports real-time uploading and uploading by statistic cycle,                          |
|                      | Supports generating daily, weekly, monthly or annually reports,                         |
| People Counting      | Supports dynamic deduplication based on face picture comparison, and can filter out     |
|                      | the target with the same custom face pictures, same attributes, or filter out repeated  |
|                      | invalid targets within the set time interval,   |
|                      | Supports face feature deduplication,  |
|                      | Supports people flow data replenishment   |
|                      | Supports up to 8 detection regions, and independent arming schedule and linkage         |
|                      | method  |
|                      | Supports 2 detection modes: regional people queuing-up, waiting time detection          |
|                      | Generates reports to compare the efficiency of different queuing-ups and display the    |
|                      | changing status of one queue  |
| Queue Management     | Supports raw data export for further analysis   |
| -                    | Supports real-time data uploading and scheduled data uploading                          |
|                      | Regional people queuing-up: supports 4 alarm trigger conditions, including greater      |
|                      | than threshold, less than threshold, equal to threshold, not equal to threshold         |
|                      | Waiting time detection: supports 1 alarm trigger condition, including greater than      |
|                      | threshold   |
|                      | Line crossing, intrusion, region entrance, region exiting                               |
| Perimeter Protection | Support alarm triggering by specified target types (human and vehicle)                  |
|                      | Support combined event alarm triggering   |
|                      | A graphic description of visits (by calculating amount of people or amount of dwell     |
| Heat Map             | time) in a configured area.,  |
|                      | Two report types are available, space heat map and time heat map line chart.            |
|                      | Detects up to 30 human targets simultaneously   |
| Hard Hat Detection   | Supports up to 4 shield regions   |
| NA-t- d-t-           | Intrusion detection, line crossing detection, region entrance detection, region exiting |
| Metadata             | detection, face capture, multi-target-type detection                                    |



|                          | Supports up to 8 detection regions, and independent arming schedule and linkage method  |  |
|--------------------------|---|--|
|                          | Supports 3 detection modes: people density detection, number of people exception        |  |
|                          | detection, waiting time exception detection   |  |
|                          | Supports parameter settings: alarm times per exception, alarminterval, first alarm      |  |
|                          | delay   |  |
|                          | Supports searching real-time number of people   |  |
|                          | People density detection: supports scheduled uploading, number of people change         |  |
| Regional People Counting | uploading, congestion level uploading   |  |
|                          | Number of people exception detection: supports 6 alarm trigger conditions, including    |  |
|                          | greater than threshold A, less than threshold A, equal to threshold A, not equal to     |  |
|                          | threshold A, greater than threshold A and less than threshold B, less than threshold A  |  |
|                          | or greater than threshold B (threshold A should be less than threshold B)               |  |
|                          | Waiting time exception detection: supports 3 alarm trigger conditions, including        |  |
|                          | greater than threshold A, less than threshold A, greater than threshold A and less than |  |
|                          | threshold B (threshold A should be less than threshold B)                               |  |
|                          | Supports up to 8 detection regions, and independent arming schedule and linkage         |  |
|                          | method  |  |
| On/Off Duty Detection    | Supports 2 detection modes: absence detection, on/off duty detection                    |  |
|                          | Supports parameter settings: person on duty, absence duration                           |  |
| General                  | Supports parameter settings, person on daty, absence daration                           |  |
|                          | 12 VDC ± 20%, 1.87 A, max. 22.4 W,two-core terminal block,                              |  |
| Power                    | PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.53 A to 0.4 A, max. 22.4 W        |  |
| Material                 | Aluminum alloy body   |  |
| Dimension                | Ø155 mm × 140.4 mm (Ø6.10" × 5.53")   |  |
| Package Dimension        | 206 mm × 206 mm × 230 mm (8.12" × 8.12" × 9.06")  |  |
| Weight                   | Approx. 1300 g (2.87 lb.)   |  |
| With Package Weight      | Approx. 1980 g (4.37 lb.)   |  |
| Storage Conditions       | -40 °C to 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)               |  |
| Startup and Operating    |   |  |
| Conditions               | -40 °C to 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)               |  |
|                          | 33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, |  |
| Language                 | Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,   |  |
| Language                 | Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, |  |
|                          | Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian         |  |
| General Function         | Heartbeat,anti-banding,one-key reset,mirror,password protection,flash log               |  |
| Heater                   | Yes   |  |
|                          | Supports adding alarm box (DS-FM2466) in the LAN to expand 6 additional input and 6     |  |
| Device Management        | output alarminterfaces  |  |
| Approval                 |   |  |
|                          | 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,                              |  |
| EMC                      | RCM: AS/NZS CISPR 32: 2015,   |  |
|                          | IC: ICES-003: Issue 7,  |  |
|                          | KC: KN32: 2015, KN35: 2015  |  |



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

## 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  |  |  |
|------------------------|--|--|--|
|                        | Hikvision products at this level are equipped for use in     |  |  |
| Ton lovel protection   | areas where professional anti-corrosion protection is a      |  |  |
| Top-level protection   | must. Typical application scenarios include coastlines,      |  |  |
|                        | docks, chemical plants, and more.                            |  |  |
|                        | Hikvision products at this level are equipped for use in     |  |  |
|                        | areas with moderate anti-corrosion demands. Typical          |  |  |
| Moderate protection    | 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     |  |  |
| No specific protection | areas where no specific anti-corrosion protection is needed. |  |  |



## Available Model

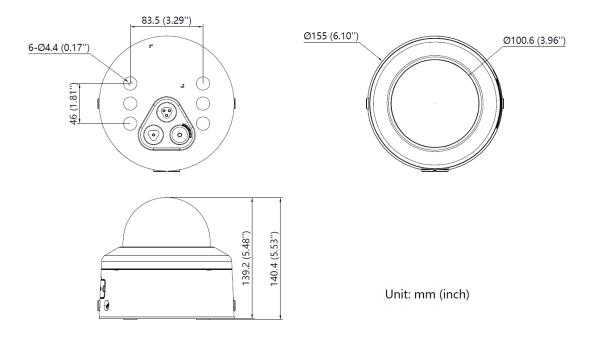
iDS-2CD7546G2-XZHSY(8-32mm)

iDS-2CD7546G2-XZHSY(2.8-12mm)

iDS-2CD7546G2-XZHS(8-32mm)

iDS-2CD7546G2-XZHS(2.8-12mm)

## Dimension



## Accessory

## Optional

| DS-1473ZJ-155 | DS-1471ZJ-155   | DS-1475ZJ-SUS   | DS-1476ZJ-SUS | DS-1475ZJ-Y |
|---------------|-----------------|-----------------|---------------|-------------|
|               | I               |                 |               |             |
| DS-1476ZJ-Y   | DS-1471ZJ-155-Y | DS-1473ZJ-155-Y |               |             |
|               |                 |                 |               |             |

<sup>\*</sup>Anti-corrosion cameras (-Y models) are recommended to be used with anti-corrosion brackets (-Y bracket models).

## See Far, Go Further



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