

# 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	<ul> <li>2.8 to 12 mm, horizontal FOV114.6° to 41.8°, vertical FOV 59.3° to 23.6°, diagonal FOV 141.3° to 48.1°</li> <li>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°</li> </ul>				
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	<ul> <li>2.8 to 12 mm:</li> <li>D (Detect): 151.7 m, O (Observe): 60.2 m, R (Recognize): 30.3 m, I (Identify): 15.2 m</li> <li>8 to 32 mm:</li> <li>D (Detect): 400 m, O (Observe): 158.7 m, R (Recognize): 80 m, I (Identify): 40 m</li> <li>The DORI values are calculated using pixel densities for different use cases as recommended by the EN 62676-4 standard.</li> </ul>				
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				
AI 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)         60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)				



Third Stream	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)			
	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)			
Fourth Stream	50 Hz: 25 fps (704 × 576, 640 × 480)			
	60 Hz: 30 fps (704 × 480, 640 × 480)			
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480)			
	60 Hz: 30 fps (704 × 480, 640 × 480)			
	Main stream: H.265+/H.265/H.264+/H.264,			
	Sub-stream: H.265/H.264/MJPEG,			
Video Compression	Third stream: H.265/H.264,			
	Fourth stream: H.265/H.264/MJPEG,			
	Fifth stream: H.265/H.264/MJPEG			
Video Bit Rate	32 Kbps to 8 Mbps			
Н.264 Туре	Baseline Profile, Main Profile, High Profile			
Н.265 Туре	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			
	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps			
Audio Bit Rate	(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)			
	Up to 32 users			
User/Host	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			
Jecurry	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			
Network Storage				
Client	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	$Rotate\ mode, saturation, brightness, contrast, sharpness, white\ balance, AGC, adjustable$				
inage settings	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.				
Image Stabilization	EIS				
Interface					
Video Output	1 Vp-p Composite Output (75 $\Omega$ /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 (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp,				
	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				
	vehicle)), video tampering alarm, video quality diagnosis, exception (network				
Basic 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				
	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger a larm				
Linkage	output,trigger recording,trigger capture,audible warning				
Deep Learning Function					
	Supports simultaneous detection and capture of human body, face, and vehicle,				
Multi-target-type Detection	Gets 7 face features,				
	Gets 13 human body features,				
	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				
	supports dynamic mostre mask				



	Detects up to 120 faces simultaneously, captures up to 40 face pictures per frame
	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°,
Face Capture	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
- ace Comparison	Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total,
race comparison	Supports face library 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,
Poonto Counting	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
Derimeter Drotection	Support alarm triggering by specified target types (human and vehicle)
Perimeter Protection	
Heat Map	Support combined event alarm triggering
	A graphic description of visits (by calculating amount of people or amount of dwell
	time) in a configured area.,
	Two report types are available, space heat map and time heat map line chart.
Hard Hat Detection	Detects up to 30 human targets simultaneously
	Supports up to 4 shield regions
Metadata	Intrusion detection, line crossing detection, region entrance detection, region exiting
	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, alarm interval, first alarm delay			
	Supports searching real-time number of people			
Regional People Counting	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				
Devices	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)			
Conditions	33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian			
	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			
nedlei	Supports adding alarm box (DS-FM2466) in the LAN to expand 6 additional input and 6			
Device Management	output alarminterfaces			
Approval	output aranninterfaces			
ראאי טאמו	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,			
FMC	RCM: AS/NZS CISPR 32: 2015,			
EMC				
	IC: ICES-003: Issue7,			
	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		
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	
Top 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) a way 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
DS-1476ZJ-Y	DS-1471ZJ-155-Y	DS-1473ZJ-155-Y		

\*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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