

# iDS-2CD7A46G0/P-IZHS(Y) 4 MP ANPR IR Varifocal Bullet Network Camera



















- High quality imaging with 4 MP resolution
- Excellent low-light performance via DarkFighter technology
- Clear imaging against strong back light due to 140 dB WDR technology
- License Plate Recognition
- 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)



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### Function

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.

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# Specification

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Camera						
Image Sensor	1/1.8" Progressive Scan CMOS					
Max. Resolution	2688 × 1520					
Min. Illumination	Color: 0.0005 Lux @ (F1.2, AGC ON);					
Willi. Illumination	B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR					
Shutter Time	1 s to 1/100,000 s					
Day & Night	IR cut filter					
Day & Night	Blue glass module to reduce ghost phenomenon					
Lens						
	2.8 to 12 mm, horizontal FOV: 114.5° to 41.8°, vertical FOV: 59.3° to 23.6°, diagonal					
Focal Length & FOV	FOV: 141.1° to 48°					
rocal Leligtii & rov	8 to 32 mm, horizontal FOV: 42.5° to 15.1°, vertical FOV: 23.3° to 8.64°, diagonal FOV:					
	49.6° to 17.3°					
Focus	Auto, semi-auto, manual					
Iris Type	P-iris P-iris					
Aportura	2.8 to 12 mm: F1.2 to F2.5					
Aperture	8 to 32 mm: F1.7 to F1.73					
DORI						
	Wide:					
	2.8 to 12 mm: D: 60 m, O: 23.8 m, R: 12 m, I: 6 m					
DON	8 to 32 mm: 150.3 m, O: 59.7 m, R: 30.1 m, I: 15 m					
DORI	Tele:					
	2.8 to 12 mm: D: 149 m, O: 59.1 m, R: 29.8 m, I: 14.9 m					
	8 to 32 mm: D: 400 m, O: 158.7 m, R: 80 m, I: 40 m					
Illuminator						
Supplement Light Type	IR					
Considerate Hight Dance	2.8 to 12 mm: 50 m					
Supplement Light Range	8 to 32 mm: 100 m					
Smart Supplement Light	Yes					
IR Wavelength	850 nm					
Video						
<b>M</b> 4 : C1	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)					
Main Stream	60 Hz: 30 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720)					
	50 Hz: 25 fps (704 × 576, 640 × 480)					
Sub-Stream	60 Hz: 30 fps (704 × 480, 640 × 480)					
TI: 10:	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)					
Third Stream	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)					
F C.	50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)					
Fourth Stream	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)					
	50 Hz: 25 fps (704 × 576, 640 × 480)					
Fifth Stream						



	NA : 1 1 205 / 11 205 / 11 204 / 11 204					
	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,					
201 202	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.265 and H.264 encoding					
Region of Interest (ROI)	4 fixed regions for each stream					
Target Cropping	Yes					
Audio						
Audio Type	Mono sound					
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC					
A. die Die D	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/44.1 kHz/48 kHz					
Environment Noise Filtering	Yes					
Network						
	TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,					
Protocols	PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, 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. 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					
	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: IE8+					
Web Browser	Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+					
	Local service: Chrome 41.0+, Firefox 30.0+					
Image						
Image Parameters Switch	Yes					
-	Saturation, brightness, contrast, sharpness, gain, white balance adjustable by client					
Image Settings	software or web browser					
Day/Night Switch	Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger					
Wide Dynamic Range (WDR)	140 dB					
SNR	≥ 52 dB					



Image Enhancement	BLC, HLC, Defog, 3D DNR				
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24bit 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				
Audio	With -Y: 1 input (line in), 1 output (line out), 3.5 mm connector				
Alarm	2 input, 2 outputs (max. 24 VDC, 1 A)				
RS-485	With -Y: 1 RS-485 (half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)				
Reset Key	Yes				
Power Output	With -Y: 12 VDC, max. 100 mA				
Wiegand	-Y: 1 Wiegand (CardID 26bit, SHA-1 26bit, Hik 34bit, NEWG 72bit)				
Event					
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection				
Smart Event	Line crossing detection, intrusion detection, region entrance detection, region exiting detection, audio exception detection, scene change 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					
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types				
Road Traffic and Vehicle Detection	Blocklist and allowlist: up to 10,000 records  Support license plate recognition of motorcycles (only in checkpoint scenario)  Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)  License plate recognition rate ≥98%				
Metadata	Intrusion detection, line crossing detection, region entrance detection, region exiting detection, road traffic				
General					
Power	12 VDC ± 20%, 1.19 A, max. 14.28 W, three-core terminal block PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.396 A to 0. 295 A, max. 16.8 W				
Material	Aluminum alloy body				
Dimension	Without -Y: Ø144 × 347 mm (Ø5.7" × 13.7") With -Y: Ø140 × 351 mm (Ø5.5" × 13.8")				
Package Dimension	405 × 190 × 180 mm (15.9" × 7.5" × 7.1")				
Weight	Approx. 1950 g (4.2 lb.)				
With Package Weight	Approx. 3070 g (6.7 lb.)				
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)				
Startup and Operating Conditions	-40 °C to 60 °C (-40 °F to 140 °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,				
	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,				
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian				
General Function	Anti-flicker, 5 streams, EPTZ, heartbeat, mirror, privacy mask, flash log, password reset				
General Function	via email, pixel counter				
Approval					
	FCC (47 CFR Part 15, Subpart B);				
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EEN 61000-3-3:2013+A1:2019, EN				
EMC	50130-4: 2011 +A1: 2014);				
	RCM (AS/NZS CISPR 32: 2015);				
	IC (ICES-003: Issue 7);				
	KC (KN 32: 2015, KN 35: 2015)				
	UL (UL 62368-1);				
	CB (IEC 62368-1:2014+A11);				
Safety	CE-LVD (EN 62368-1:2014/A11:2017);				
	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	IK10 (IEC 62262:2002), IP67 (IEC 60529-2013)				
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)				
Automotive and Railway	EN50121-4				
Other	PVC FREE				

#### Available Model

iDS-2CD7A46G0/P-IZHSY (2.8 to 12 mm, 8 to 32 mm) iDS-2CD7A46G0/P-IZHS (2.8 to 12 mm, 8 to 32 mm)

# Typical Application

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

-Y model: This model has MODERATE PROTECTION.

Without -Y model: This model has NO SPECIFIC PROTECTION.

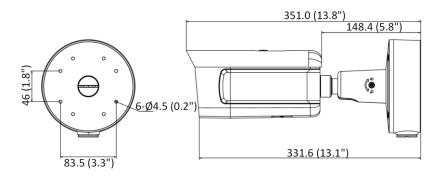
Level	Description		
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion		
	protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and		
	more.		
Moderate protection	Hikvision products at this level are equipped for use in areas with moderate anti-corrosion		
	demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away		
	from coastlines, as well as areas affected by acid rain.		

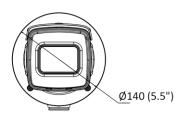


No specific protection Hikvision products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

### Dimension

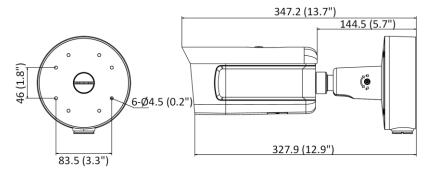
With -Y model:

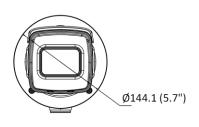




Unit: mm (inch)

#### Without -Y model:





Unit: mm (inch)

# Accessory

## Optional

DS-1475ZJ-Y	DS-1475ZJ-SUS	DS-2251ZJ	DS-1476ZJ-Y	DS-1476ZJ-SUS
Vertical Pole Mount	Vertical Pole Mount	Pendant Mount	Corner Mount	Corner Mount



Distributed by

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