

# iDS-2CD7186G0/P-IZ(H)S(Y)(D) 4K LPR IR Varifocal Dome Network Camera





# - DeepinView

- High quality imaging with 8 MP resolution
- Clear imaging against strong back light due to 120 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)



### - Function

**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.

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				
Max. Resolution	3840 × 2160			
Min. Illumination	Color: 0.002 Lux @ (F1.2, AGC ON), B/W: 0.0002 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			
Angle Adjustment	Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°			
Lens				
Focal Length & FOV	2.8 to 12 mm, horizontal FOV 112.3° to 41.2°, vertical FOV 58.1° to 23.1°, diagonal FOV 137.4° to 47.3°  8 to 32 mm, horizontal FOV 37.0° to 15.0°, vertical FOV 21.0° to 9.0°, diagonal FOV 43.0° to 17.0°			
Focus				
Focus	Auto, Semi-auto, Manual P-iris			
Iris Type				
DORI	perture 2.8 to 12 mm: F1.2, 8 to 32 mm: F1.6			
DORI	2.8 to 12 mm:			
DORI	D: 216.0 m, O: 85.7 m, R: 43.2 m, I: 21.6 m 8 to 32 mm: D: 580.0 m, O: 230.2 m, R: 116.0 m, I: 58.0 m			
Illuminator				
Supplement Light Type	IR			
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			
Video				
Main Stream	50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)			
Sub-Stream	50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (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)			
Video Compression	Main stream: H.265+/H.265/H.264, Sub-stream: H.265/H.264/MJPEG, 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 16 Mbps			
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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 Preset, Patrol, and Auto Tracking settings			
Audio				
Audio Type	Mono sound			
Audio Compression	G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC			
Audio Bit Rate	64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)			
Audio Sampling Rate	8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz			
Environment Noise Filtering	Yes			
Network				
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPOE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SFTP, SRTP			
Simultaneous Live View	Up to 20 channels			
API	Open Network Video Interface (Profile S, Profile G, Profile T), ISAPI, ISUP			
User/Host	Up to 32 users  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			
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: IE10, IE11, 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	Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger			
Wide Dynamic Range (WDR)	120 dB			
Image Enhancement	BLC, HLC, 3D DNR, Defog, EIS			
Privacy Mask	8 programmable polygon privacy masks, mask color or mosaic configurable			
Picture Overlay	LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.			
Interface				
Video Output	1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)			
Ethernet Interface	1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port			
On-Board Storage	Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB			



Built-in Microphone	Yes,2 built-in microphone(s)			
Built-in Speaker	Max. power consumption: 1.5 W, max. sound pressure level: 98 dB, speaker range: 10 m			
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, 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			
Alarm	2 input(s), 2 output(s) (max. 24 VDC/24 VAC, 1 A)			
RS-485	1 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)			
Reset Key	Yes			
Power Output	12 VDC, max. 100 mA			
Event				
Basic Event	Motion detection, video tampering alarm, video quality diagnosis, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), 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			
Termical Frotestion	Support alarm triggering by specified target types (human and vehicle)			
Road Traffic and Vehicle	Blocklist and allowlist: up to 10,000 records			
Detection	Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)			
General				
	12 VDC ± 25%, 0.97 A, max. 11.43 W,three-core terminal block,reverse polarity			
Davisa	protection,			
Power	24 VAC ± 25%, 0.73 A, max. 10.67 W,			
	PoE: 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.19 A to 0.28 A, max. 11.92 W			
Material	Base: metal, cover: metal			
Dimension	Ø144.3 mm × 114.1 mm (Ø5.7" × 4.5")			
Package Dimension	244 mm × 174 mm × 173 mm (9.6" × 6.9" × 6.8")			
Weight	Approx. 990 g (2.0 lb.)			
With Package Weight	Approx. 1425 g (3.1 lb.)			
Storage Conditions	-30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)			
Startup and Operating	-30 °C to 60 °C (-22 °F to 140 °F).			
Startup and Operating Conditions	With heater model (-H): -40 $^{\circ}$ C to 60 $^{\circ}$ C (-40 $^{\circ}$ F to 140 $^{\circ}$ F).			
Conditions	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,			
Lanbaabe	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,			
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian			
General Function	Heartbeat, one-key reset, mirror, password protection, watermark			
Cable Length	0.25 m (0.8 ft.)			



Approval			
	FCC: 47 CFR Part 15, Subpart B,		
	CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN		
EMC	50130-4: 2011 +A1: 2014, EN50121-4		
EMC	RCM: AS/NZS CISPR 32: 2015,		
	IC: ICES-003: Issue 7,		
	KC: KN32: 2015, KN35: 2015		
Safety	UL: UL 62368-1,		
	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		

### - Available Model

iDS-2CD7186G0/P-IZHSY (D) (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.

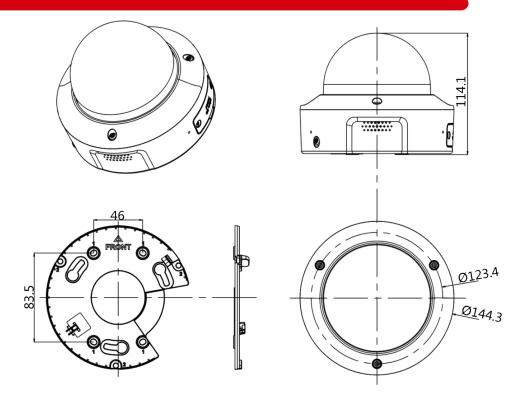
-Y model: This model has MODERATE PROTECTION.

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





Unit: mm



## Accessory

#### - Optional

PC-160 Wall Mount	CM Corner Mount	RCM-VH In-Ceiling Mount	PM1 Vertical Pole Mount	CM1 Corner Mount
PM	СРМ	WML		

Vert	PM ical Pole Mount	CPM Pendant Mount	WML Wall Mount	DS-2280ZJ-WA140
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<sup>\*</sup>Bracket model with -Y or -AKS supports anti-corrosion protection.

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**HIKVISION** 

#### Headquarters

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

Hikvision USA T+1-909-895-0400 sales.usa@hikvision.com

Hikvision Australia T+61-2-8599-4233 salesau@hikvision.com

Hikvision India T+91-22-28469900 sales@pramahikvision.com

Hikvision Canada T+1-866-200-6690 sales.canada@hikvision.com

Hikvision Thailand T+662-275-9949 sales.thailand@hikvision.com Hikvision Europe T +31-23-5542770 sales.eu@hikvision.com

Hikvision Italy T+39-0438-6902 info.it@hikvision.com

Hikvision Brazil T +55 11 3318-0050 Latam.support@hikvision.com

Hikvision Turkey T +90 [216]521 7070- 7074 sales.tr@hikvision.com

Hikvision Malaysia T+601-7652-2413 sales.my@hikvision.com Hikvision UK & Ireland T +01628-902140 sales.uk@hikvision.com

Hikvision South Africa Tel: +27 [10] 0351172 sale.africa@hikvision.com

Hikvision France T +33(0)1-85-330-450 info.fr@hikvision.com

Hikvision Kazakhstan T+7-727-9730667 nikia.panfilov@hikvision.ru

Hikvision Vietnam T +84-974270888 sales.vt@hikvision.com Hikvision UAE T +971-4-4432090 salesme@hikvision.com

Hikvision Singapore T +65-6684-4718 sg@hikvision.com

Hikvision Spain T +34-91-737-16-55 info.es@hikvision.com

Hikvision Tashkent T +99-87-1238-9438 uzb@hikvision.ru

Hikvision Hong Kong T +852-2151-1761 info.hk@hikvision.com Hikvision Russia T+7-495-669-67-99 saleru@hikvision.com

Hikvision Korea T +82-[0]31-731-8817 sales.korea@hikvision.com

Hikvision Poland T +48-22-460-01-50 info.pl@hikvision.com

Hikvision Indonesia T+62-21-2933759

Sales.Indonesia@hikvision.com

Hikvision Colombia
sales.colombia@hikvision.com