

# iDS-2CD7046G0/EP-IHSY 4 MP ANPR Box 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 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 (IP66) and vandal proof (IK10)





#### 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.



# Specification

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), 0 Lux with IR				
Shutter Time	1 s to 1/100,000 s				
Day & Night	IR cut filter				
	Blue glass module to reduce ghost phenomenon				
Lens					
	3.8 to 16 mm, horizontal FOV: 109.1° to 29.6°, vertical FOV: 61.3° to 16.8°, diagonal				
Focal Longth & FOV	FOV: 125.1° to 33.9°				
Focal Length & FOV	11 to 40 mm, horizontal FOV: 39.1° to 12.1°, vertical FOV: 21.4° to 6.8°, diagonal FOV:				
	45.8° to 13.9°				
Lens Mount	CS mount				
Focus	Manual				
Iris Type	P-iris				
Aurantour	3.8 to 16 mm: F1.4				
Aperture	11 to 40 mm: constant F1.4 throughout the zoom range				
DORI					
	Wide:				
	3.8 to 16 mm: D: 57.2 m, O: 22.7 m, R: 11.4 m, I: 5.7 m				
0001	11 to 40 mm: D: 165.5 m, O: 65.7 m, R: 33.1 m, I: 16.6 m				
DORI	Tele:				
	3.8 to 16 mm: D: 206.9 m, O: 82.1 m, R: 41.4 m, I: 20.7 m				
	11 to 40 mm: 510.3 m, O: 202.5 m, R: 102.1 m, I: 51 m				
Illuminator					
Supplement Light Type	IR				
C 1	3.8 to 16 mm: 80 m				
Supplement Light Range	11 to 40 mm: 120 m				
Smart Supplement Light	Yes				
IR Wavelength	850 nm				
Video					
	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)				
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 (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480)				
	60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)				
Fifth Stream	50 Hz: 25 fps (704 × 576, 640 × 480)				
	60 Hz: 30 fps (704 × 480, 640 × 480)				
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Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream/Third stream/Fourth stream/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/AAC/MP3				
Audio Bit Rate	64 Kbps (G.711)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/16 to 64				
	Kbps (AAC)/8 to 320 Kbps (MP3)				
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, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP,				
Trotocois	PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS				
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				
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, Hik-Central				
Web Browser	Plug-in required live view: IE8+ 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				
Image Settings	Saturation, brightness, contrast, sharpness, gain, white balance adjustable by client 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				
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Interface				
Video Output	1 Vp-p Composite Output (75 $\Omega$ /CVBS) (Only for debugging)			
Ethernet Interface	1 RJ45 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), 1 output (line out), 3.5 mm connector			
Alarm	2 inputs, 2 outputs (max. 24 VDC, 1A)			
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, video tampering alarm, exception (network disconnected, IP			
Basic Event	address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality			
	diagnosis, vibration detection			
	Intrusion detection, scene change detection, audio exception detection, defocus			
	detection			
6 15 1	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions			
Smart Event	configurable			
	Region entrance detection, up to 4 regions configurable			
	Region exiting detection, up to 4 regions configurable			
Links	Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm			
Linkage	output, trigger recording, trigger capture			
Deep Learning Function				
	Blocklist and allowlist: up to 10,000 records			
Dood Troffic and Vahiala	Captures vehicle that has no license plate			
Road Traffic and Vehicle	Support license plate recognition of motorcycles (only in checkpoint scenario)			
Detection	Support vehicle attribute detection, including vehicle type, color, brand, etc. (City			
	Street mode is recommended.)			
Darimeter Protection	Line crossing, intrusion, region entrance, region exiting			
Perimeter Protection	Support alarm triggering by specified target types			
Metadata	Metadata of road traffic is supported.			
General				
	24 VDC ± 20%, 0.9 A, max. 21.6 W, three-core terminal block			
Power	24 VAC ± 20%, 0.93 A, max. 22.1 W, three-core terminal block			
	PoE: 802.3bt, Type3, Class 5, 42.5V to 57 V, 0.58 A to 0.44 A, max. 24.6 W			
Material	Aluminum alloy body, PP sun shield, PC front panel			
Dimension	465.3 × 169.2 × 164.7 mm (18.3" × 6.7" × 6.5")			
Package Dimension	615 × 360 × 225 mm (24.2" × 14.2" × 8.9")			
Weight	Approx. 3800 g (8.4 lb.)			
With Package Weight	Approx. 6000 g (13.2 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 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)			
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			

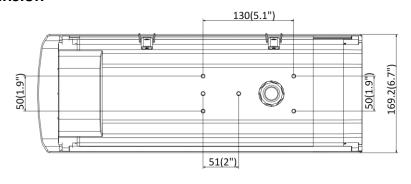


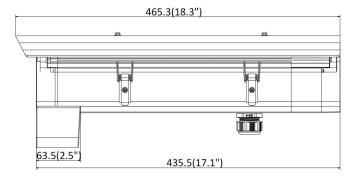
General Function	Anti-flicker, 5 streams, EPTZ, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter				
Heater	Yes				
Approval					
	FCC (47 CFR Part 15, Subpart B);				
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN				
FMC	50130-4: 2011 +A1: 2014);				
EMC	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	IP66 (IEC 60529-2013), IK10 (IEC 62262:2002)				
Anti-Corrosion Protection	With -Y: NEMA 4X(NEMA 250-2018)				
Automotive and Railway	With -R: EN50121-4				
Other	PVC FREE				

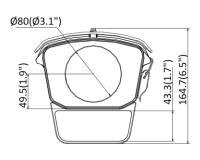
### Available Model

iDS-2CD7046G0/EP-IHSY (3.8 to 16 mm, 11 to 40 mm)

## Dimension







Unit: mm(inch)



- Accessory
- Optional

DS-1293ZJ-Y Wall Mount	DS-1275ZJ-Y	DS-1214ZJ-L-Y2	DS-1214ZJ-T-Y
	Vertical Pole	<b>Horizontal Pole</b>	<b>Horizontal Pole</b>
	Mount	Mount	Mount





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