

iDS-2CD7046G0/EP-IHSY 4 MP ANPR Box Network Camera

DarkFighter

DeepinView^{series}



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 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

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	
Focal Length & FOV	3.8 to 16 mm, horizontal FOV: 109.1° to 29.6°, vertical FOV: 61.3° to 16.8°, diagonal FOV: 125.1° to 33.9° 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
Aperture	3.8 to 16 mm: F1.4 11 to 40 mm: constant F1.4 throughout the zoom range
DORI	
DORI	Wide: 3.8 to 16 mm: D (Detect): 57.2 m, O (Observe): 22.7 m, R (Recognize): 11.4 m, I (Identify): 5.7 m 11 to 40 mm: D (Detect): 165.5 m, O (Observe): 65.7 m, R (Recognize): 33.1 m, I (Identify): 16.6 m Tele: 3.8 to 16 mm: D (Detect): 206.9 m, O (Observe): 82.1 m, R (Recognize): 41.4 m, I (Identify): 20.7 m 11 to 40 mm: D (Detect): 510.3 m, O (Observe): 202.5 m, R (Recognize): 102.1 m, I (Identify): 51 m
Illuminator	
Supplement Light Type	IR
Supplement Light Range	3.8 to 16 mm: 80 m 11 to 40 mm: 120 m
Smart Supplement Light	Yes
IR Wavelength	850 nm
Video	
Main Stream	50 Hz: 25 fps (2688 × 1520, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 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 (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)
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.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/AAC-LC/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-LC)/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, 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 24 bit bmp format

Image Stabilization	EIS
Privacy Mask	8 programmable polygon privacy masks
Interface	
Video Output	1 Vp-p Composite Output (75 Ω/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	
Basic Event	Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD error), video quality diagnosis, 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 output, trigger recording, trigger capture
Deep Learning Function	
Road Traffic and Vehicle Detection	Blocklist and allowlist: up to 10,000 records Captures vehicle that has no license plate 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.)
Perimeter Protection	Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle)
Metadata	Road traffic
General	
Power	24 VDC ± 20%, 0.9 A, max. 21.6 W, three-core terminal block 24 VAC ± 20%, 0.93 A, max. 22.1 W, three-core terminal block PoE: IEEE 802.3bt, Type3, Class 5, 42.5 V 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 mm × 169.2 mm × 164.7 mm (18.3" × 6.7" × 6.5")
Package Dimension	615 mm × 360 mm × 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-banding, heartbeat, mirror, flash log, password reset via email, pixel counter
Heater	Yes

Approval	
EMC	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 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7); KC (KN 32: 2015, KN 35: 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	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

▪ 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.

This model has MODERATE PROTECTION.

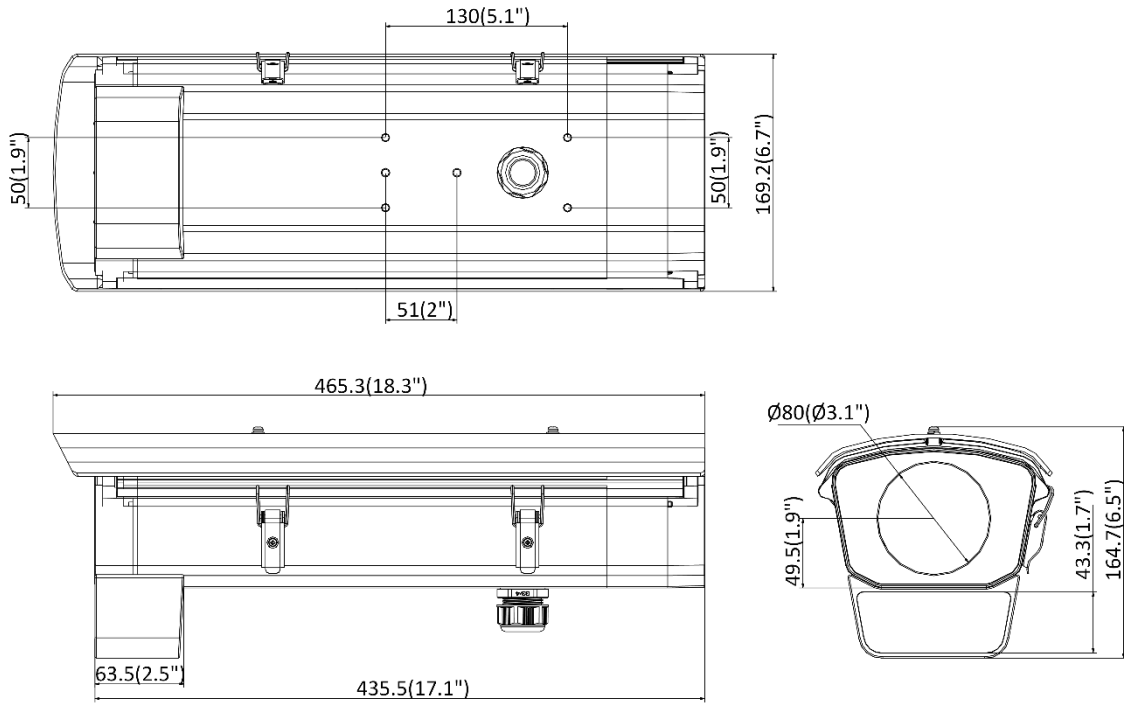
Level	Description
Top-level protection	Hikvision products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Typical application scenarios include coastlines, docks, chemical plants, and more.
Moderate protection	Hikvision products at this level are equipped 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.

▪ Available Model

iDS-2CD7046G0/EP-IHSY(11-40mm)(C)

iDS-2CD7046G0/EP-IHSY(3.8-16mm)(C)

▪ Dimension



Unit: mm(inch)

▪ **Accessory**

▪ **Optional**

DS-1293ZJ-Y Wall mount	DS-1275ZJ-Y Vertical pole mount	DS-1214ZJ-L-Y2 Horizontal pole mount	DS-1214ZJ-T-Y Horizontal pole mount
			

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