AI-7046G

4 MP ANPR Box Network Camera (11 to 40 mm)

3D DNR | **802.3bt Hi-PoE** | **H.265+** | | **P Iris** |
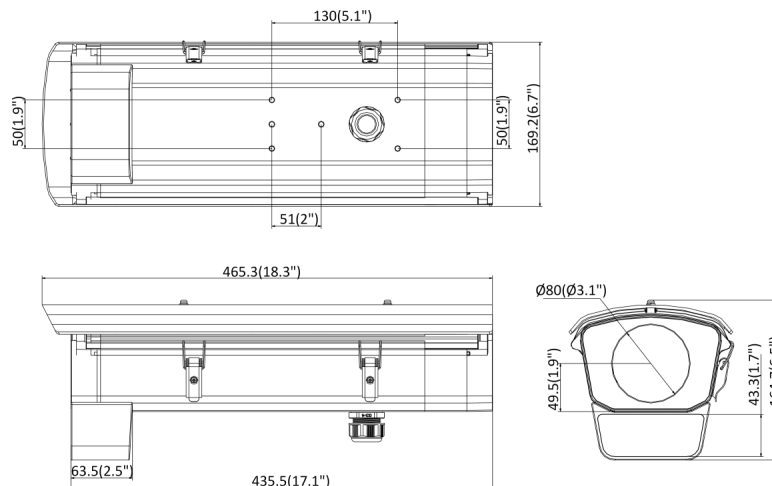
Road Traffic and Vehicle Detection

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.

KEYFEATURE

► 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)

DIMENSIONS

130(5.1")
50(1.9")
50(1.9")
169.2(6.7")
51(2")

465.3(18.3")
63.5(2.5")
435.5(17.1")

Ø80(Ø3.1")
49.5(1.9")
43.3(1.7")
164.7(6.5")

Unit: mm(inch)

SPECIFICATIONS

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	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	constant F1.4 throughout the zoom range

Illuminator	
Supplement Light Type	IR
Supplement Light Range	120 m (394 ft)
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.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, 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
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 reboot, HDD full, HDD error), video quality diagnosis, vibration detection

Smart Event	Intrusion detection, scene change detection, audio exception detection, defocus detection
	Line crossing detection, up to 4 lines configurable Intrusion detection, up to 4 regions configurable
	Region entrance detection, up to 4 regions configurable
	Region exiting detection, up to 4 regions configurable
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
Metadata	Metadata of road traffic is supported.
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: 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)
General Function	Anti-flicker, 5 streams, EPTZ, heartbeat, mirror, privacy mask, 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)