DHI-ITC352-AU3F-IRL8ZF1640

3MP All-in-one IR AI Enforcement Camera

- GS-CMOS image sensor.
- 2048 × 1536@50fps.
- Video compression standards: H.265/H.264M/H.264H/H.264B/MJPEG.
- Integrated design, IP66.
- 850 nm IR illumination.

System Overview

The camera impresses people with its high-performance AI processor, traffic-specific high frame rate GS-CMOS image sensor, and deep learning algorithms. The IR LED illuminators help supplement light when the camera capture license plates, without using external flashing light or strobe, significantly reducing light pollution.

The camera is ideal for intelligent traffic management and safe city businesses with its capacities of traffic violations capturing in both ANPR and E-Police modes, passing vehicle records, traffic data collection, event detection, and more.

Functions

Reduced light pollution

The IR illuminators help supplement light when the camera capture license plates, without using external flashing light or strobe, significantly reducing light pollution.

Ultra-high frame rate

Uses traffic-specific high-performance GS-CMOS image sensor with 50fps ultra-high frame rate, high signal-to-noise ratio and wide dynamic range, displaying realistic video images day and night.

Video metadata

High-performance AI processor and deep learning algorithms allow the camera to detect and extract detailed information of motor and non-motor vehicles, providing reliable data source for business decision-making.

Applicable to various road scenes

Ideal for use in both ANPR and E-Police modes, capable of capturing more than ten kinds of traffic violations, and supports traffic information collection and event detection, suitable for various road scenarios.

Multi-dimensional data sensing

This is realized through GPS/BeiDou positioning.

Safe and reliable performance

Integrated design, built-in lightning protection module, IP66 protection grade, and wide temperature and voltage ranges, applicable to use in all-weather conditions.

Technical Specification

Image Processing

Image Sensor	1/1.8'' GS-CMOS
Shutter Mode	Single shutter / holographic double shutters / three shutters
Electronic Shutter Speed	1/50 s–1/100000 s (auto/manual)
Exposure Mode	Full auto/customized range/customized
Iris Control	Fixed iris/manual iris/auto iris/P iris
Lens	16mm–40mm
Image Resolution	2048 × 1536 (OSD black strip excluded)
Video Resolution	3M (2048 × 1536)/UXGA (1600 × 1200)/1080P (1920 × 1080)/720P (1280 × 720)/D1 (704 × 576)/CIF (352 × 288)
Video Frame Rate	Maximum 50 fps; main stream (1536 × 2048@25 fps), sub stream (1600 × 1200@25 fps)
Video Bit Rate	H.264: 32 kbps–32767 kbps H.265: 32 kbps–32767 kbps MJPEG: 512 kbps–32767 kbps
Video Compression	H.265/H.264M/H.264H/H.264B/MJPEG
Picture Encoding Format	JPEG
WDR	64dB
White Balance	Auto/outdoor/manual/local white balance/natural light/ street light
Noise Reduction	2DNR/3DNR
Day/Night	Supports ICR auto switch: IR cut-off filter (IRCF) with polarizing filter is used during daytime, and IR will not be filtered during nighttime
HLC (Highlight Compensation)	Yes
Bad Pixel Correction	Yes
Edge Enhancement	Yes
Illuminator Number	8 illuminators (850nm IR illuminators, brightness adjustable)

Function

Composite Image	Supports composing 1, 2, 3, or 4 pictures
Trigger Mode	Video detection/radar/coil
OSD Overlay	Time, location (video channel location), lane (number, direction), and plate number
Storage	FTP, TF card (maximum 256GB@Class10)
Alarm Event	Storage full, storage error, external alarm, no storage card, license plate blacklist, abnormal device attitude, illegal access, network disconnection, and IP conflict
Automatic Network Replenishment (ANR)	Platform, FTP
Image Tampering Prevention	Yes. Watermark and verification are available for videos and pictures
Positioning Function	GPS/BeiDou
Time Synchronization	NTP/GPS/BeiDou
Security	Authorized username and password, MAC address binding, HTTPS encryption, and network access control
Auto Registration	Yes

Intelligence

Target Detection	Motor vehicle, non-motor vehicle
Face Detection	Detects driver and front-seat passenger of motor vehicle, and non-motor vehicle driver; extracts face image
Vehicle Plate Recognition	Recognizes license plates in Russian
Vehicle Type Recognition	Vehicle head mode: Coach bus, minibus, SUV, MPV, pickup, heavy truck, medium truck, car, van, light truck Vehicle tail mode: SUV, car, van, coach bus, pickup, cargo truck, mini truck, tank truck, mixer truck
Vehicle Color Recognition	White, pink, black, red, yellow, gray, blue, green, amber, purple, brown, silver gray (color recognition is not supported during nighttime)
Motor Vehicle Violation Snapshot	ANPR mode: Wrong-way driving, overspeed, underspeed, disobey lane direction sign, cross white solid line, cross yellow solid line, illegal lane change, video speed measurement
Non-motor Vehicle Violation Snapshot	Captures traffic violations including carrying passenger, not wearing helmet, wrong-way driving, and occupying motorway
Traffic Flow Detection	Statistics of vehicle flow, queue length, average speed, lane occupancy, and more; statistics can be exported in Excel
Traffic Event Detection	Detects illegal parking and wrong-way driving of motor vehicles and traffic congestion
Video Metadata	Motor vehicle: License plate, vehicle type, vehicle color, license plate color, vehicle logo, and more (color recognition is not supported during nighttime) Non-motor vehicle: Type (two-wheelers, three-wheelers), carrying passenger or not, wearing a helmet or not, and color

Port

Lens Mount	C mount
Iris Control	1, connects to auto iris or P iris
Focus Control	1, connects to motorized vari-focal lens
Frequency Source Sync	1, supports synchronizing the camera with mains electricity
Peripheral Light	7, optocoupler signal output (can be configured as flashing light or LED strobe sync output interface, frequency adjustable)
Network	2 RJ-45 Ethernet ports, 10/100/1000M network transmission
USB	2 USB 3.0 ports
GPS	1 GPS/BeiDou port
Storage	1, supports maximum 256GB TF card local storage
RS-485	2, connects to signal detector, vehicle detector, flashing light, continuous light, and more
RS-232	4 RS-232 ports. 3 for radar connection, and 1 for serial port debugging
I/O	4, capture signal input of I/O trigger, sharing with alarm in port
Alarm Input	4, share with I/O port
Alarm Output	2, AO1 relay output and AO2 optocoupler output, can be configured as alarm output or wiper output as needed
Audio In	1, 3.5 mm (0.14'') jack
Audio Out	1, 3.5 mm (0.14'') jack
Power Output	12V DC±10% voltage output, ≤1.5A current output

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General

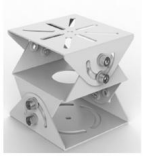
Power Supply	100V AC–240V AC (50Hz/60Hz)
Power Consumption	≤20W
Operating Temperature	–40 °C to +65 °C (–40 °F to +149 °F)
Operating Humidity	10%–90%
Protection Grade	IP66
Dimensions	554.0 mm × 204.2 mm × 209.6 mm (21.81'' × 8.04'' × 8.25'') (L × W × H)
Net Weight	4.6 kg (10.14 lb)
Gross Weight	6.6 kg (14.55 lb)
Installation	Universal joint installation
Power Adaptor	Standard

Ordering Information

Type	Part Number	Description
AI Enforcement Camera	DHI-ITC352-AU3F-IRL8ZF1640	3MP all-in-one IR AI enforcement camera
Accessory	8018	3-dimensional universal mounting bracket, needs to be purchased separately. Brackets required = number of cameras + number of flashing lights

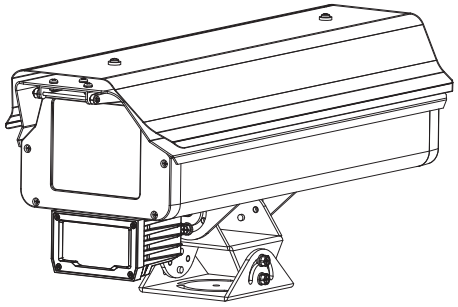
Accessories

Optional:

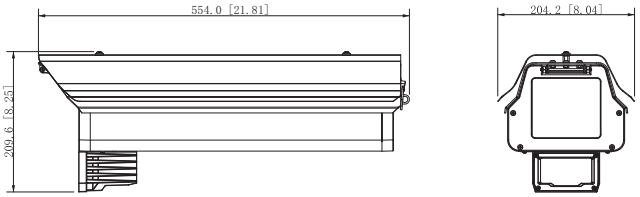


8018
3-dimensional universal mounting bracket, needs to be purchased separately. Brackets required = number of cameras + number of flashing lights

Installation



Dimensions (mm[inch])



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