DHI-ITC352-RU2D-IRL8

3MP AI Enforcement Camera

- GS-CMOS image sensor
- 2048×1536@50fps
- Video compression standards: H.265/H.264M/H.264H/H.264B/MJPEG
- Integrated design, IP67

System Overview

With industry-specific GS-CMOS image sensor, high-performance CPU processor, and deep learning algorithm, this 3MP AI enforcement camera enjoys ultra high definition, applicable for traffic violation snapshots in E-police and ANPR modes, records of passing vehicles, collection of traffic information, event detection, etc.

Functions

High-quality image

Industry-specific GS-CMOS image sensor with high sensitivity, high SNR, and excellent WDR provides lifelike images in all weathers.

Complete intelligence

High-performance CPU processor helps extract and analyze information of motor and non-motor vehicles in real-time, providing vehicle feature details for business decision-making.

Various application scenarios

Applicable to most road scenarios. Supports traffic violation detection in ANPR and E-Police modes, collection of traffic flow information, and event detection.

Complete sensing

Supports Beidou/GPS positioning and timing, gyroscope attitude detection, and multi-dimensional target sensing.

High-level protection

Integrated design, built-in lightning protection module, and IP67 protection grade, suitable for various harsh environments.

Technical Specification

Image Processing

Image sensor	1/1.8'' GS-CMOS
Shutter mode	Single shutter/double shutters/three shutters
Electronic shutter speed	1/50 s–1/100000 s (manual/auto)
Exposure mode	Supports full auto; customized auto; customized
Iris type	Fixed iris/manual iris/DC auto iris/P-IRIS auto iris
Image resolution	2048×1536 (H×V) (OSD black strip excluded)
Video resolution	3MP (2048×1536)/1080P (1920×1080)/720P (1280×720)/D1 (704×576)/CIF (352×288)
Video frame rate	Maximum 50fps; main stream (2048×1536@25fps), substream (704×576@25fps)
Video bit rate	H.264: 32kbps–32767kbps H.265: 32kbps–32767kbps MJPEG: 512kbps–32767kbps
Video compression	H.265/H.264M/H.264H/H.264B/MJPEG
Image encoding	JPEG
Wide dynamic range	64dB
White balance	Auto/home/office/night/custom color temperature
Noise reduction	2D NR/3D NR
Day/night mode	Automatic switch between day and night. IR cut-off filter (IRCF) with polarizing filter is used during daytime, and it switches to common filter at night
Highlight compensation	Yes
Bad pixel correction	Yes
Edge enhancement	Yes

Function

Composite image	Support creating composite image with 1, 2, 3, or 4 image(s).
Trigger mode	Video/radar
OSD overlay	Time, address (position of channel), lane (number, direction), plate (number and color), vehicle (speed, color, logo, brand, type), non-motor vehicle feature
Storage	FTP; TF card (up to 256GB@Class10)
Alarm event	Storage full, storage error, external alarm, no storage, vehicle plate blacklist, gyro abnormal attitude, unauthorized access, network disconnection, and IP conflict
Automatic network replenishment	Yes, through platform/FTP
Image tampering prevention	Yes, watermark and verification are available for videos and pictures
Positioning function	Yes, GPS/Beidou
Time synchronization	Yes, NTP/GPS
Attitude detection	Built-in electronic gyroscope supports attitude anomaly detection and alarm
Security	User name and password, MAC address, HTTPS, network access control
Auto register	Yes

Intelligence

Target detection	Supports detection of motor and non-motor vehicles
Face detection	Supports face detection of driver and the passenger next to driver
License plate recognition	Supports recognizing Indian plates in the baseline version; for other countries/regions, customization is required
Vehicle type detection	Supports recognizing large, medium-sized, and small vehicles, and motorcycles in the baseline version. For other vehicle types, customization is required
Vehicle color recognition	Supports recognizing white, orange, pink, black, red, yellow, gray, blue, green, purple, brown, and silver gray
Motor vehicle violation snapshot	ANPR mode: Overspeed, underspeed, unfastened safety belt, calling while driving E-police mode: Running red light, overspeed
Non-motor vehicle violation snapshot	Not wearing helmet
Vehicle flow detection	Supports statistics (by lane and by time period) on vehicle flow, average speed, vehicle type, occupancy, average queue length, etc., and supports exporting reports
Video structuring	Motor vehicle: Plate, type, color, logo, and series of vehicle; unfastened safe belt; calling while driving Non-motor vehicle: Type (non-motor vehicle or pedestrian), wearing helmet or not

Port

Lens mount	C mount
Aperture control port	1; DC auto iris or P-IRIS auto iris lens
Frequency source sync port	1; sync the camera with AC
Peripheral light port	7; optocoupler signal output (can be used as synchronous output ports of flashing light or LED strobe, frequency adjustable)
Analog output	1 BNC port
Ethernet port	2 × 10x100/1000M RJ45 port.
USB port	2 USB3.0 ports
GPS port	1
Storage port	1; maximum 256G local storage by TF card
RS-485 port	2; connecting to signal detector, vehicle detector, strobe, light, etc.
RS-232 port	4; used for serial debugging or radar connection
I/O port	4; used for I/O trigger capture signal input, or alarm input
Alarm input	4; used as I/O port
Alarm output	2; relay/optocoupler alarm output. The port can be configured as alarm output port or wiper output port
Audio input	1; 3.5 mm headphone jack
Audio output	1; 3.5 mm headphone jack
Power output	12V±10% voltage output, ≤1.5A current output

General

Power supply	100V AC–240V AC (50Hz/60Hz)
Power consumption	≤22W

Operating temperature	-40°C to +65°C (-40°F to +149°F)
Operating humidity	10%–90%
Protection grade	IP67
Dimensions (L×W×H)	544.0 mm×195.5 mm×171.5 mm (21.4''×7.7''×6.8'')
Net weight	8.0 kg (17.6 lb)
Gross weight	8.5 kg (18.7 lb)
Certification	UL/BIS/CE/FCC
Installation	Universal joint installation
Power supply	Standard
Lens	Standard

Ordering Information

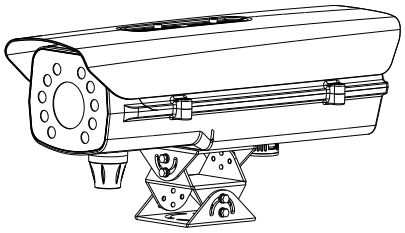
Type	Part Number	Description
3MP Camera	DHI-ITC352-RU2D-IRL8	3MP AI enforcement camera (850nm built-in IR light)
Lens	DH-PFL1040-K9PE	3MP 1'' 10–40mm motorized vari-focal P-Iris lens (included in the packing list)
Bracket	PFA162	3-dimensional universal mounting bracket (not included in the packing list)

Accessories

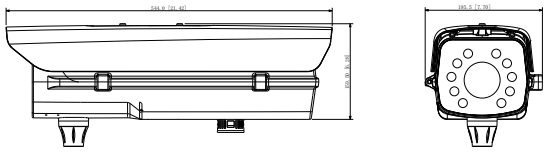
Optional:

PFA162
3-dimensional universal mounting bracket

Installation



Dimensions (mm[inch])



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