

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
- IK10(without wiper)

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

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|--------------------------|---|
| 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

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|---------------------------------|---|
| 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 |
| Speed measurement | Yes(Recommend with Radar) |
| 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/Time sync | Yes; NTP/GPS |

Intelligence

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|--------------------------------------|---|
| 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

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|----------------------------|--|
| 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 × 10×100/1000M 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 |

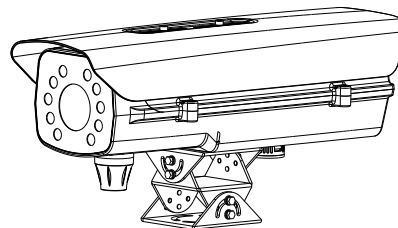
General

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

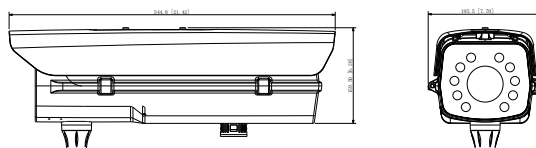
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|-----------------------|--|
| Operating temperature | -40°C to +65°C (-40°F to +149°F) |
| Operating humidity | 10%–90% |
| Protection grade | IP67,IK10(without wiper) |
| Dimensions (LxWxH) | 544.0 mm×195.5 mm×171.5 mm (21.4"×7.7"×6.8") |
| Net weight | 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 |

Installation



Dimensions (mm[inch])



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