

DHI-ITC952-SU2F-PQE-C1R1-IRL8ZF1640

9MP All-in-one IR AI Traffic Camera



System Overview

With its high-performance AI processor, 9MP All-in-one IR AI Traffic Camera delivers high quality images even in the toughest weather conditions. For monitoring, it uses deep learning algorithms and GS-CMOS image sensors with a wide dynamic range and a high frame rate, making it ideal for traffic scenarios. The IR illuminators supplement light when the camera captures license plates without using the external flashing light or strobe, significantly reducing light pollution. A radar is also built into the device, allowing it to measure vehicle speed and sense data from a wide range of perspectives.

Functions

Reduced Light Pollution

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

Ultra-high Frame Rate

Uses high performance GS-CMOS image sensors with a wide dynamic range, a high frame rate of 50 fps, and a high signal-to-noise ratio, displaying realistic video images in the day and night. This makes it ideal for traffic scenarios.

Video Metadata

Deep learning algorithms and a high-performance AI processor allow the camera to detect and extract metadata on motor vehicles and non-motor vehicles, providing a reliable data source that can be used in making effective decisions.

• GS-CMOS image sensor.

- 4096 × 2160@50 fps.
- · Video compression standards: H.265, H.264M, H.264H and MJPEG.
- · A camera, illuminator, radar and more combined in one.
- 850 nm IR illumination.
- Works in poor lighting and does not smear.
- High-speed capture.
- IP66.
- Under recommended installation and lighting conditions:

Capture rate >99%

LPR accuracy >98%

Applicable to Various Road Scenes

Ideal for scenarios where license plate recognition is needed, the camera is capable of capturing more than 10 different types of traffic violations, and supports traffic information collection and event detection.

Multi-dimensional Data Sensing

GPS positioning is supported, and used in time synchronization. A radar is also built into the device, allowing it to measure vehicle speed and sense data from a wide range of perspectives.

Safe and Reliable Performance

Built to withstand the toughest conditions, this camera functions in a wide temperature and voltage range. It allowing its camera, illuminator, radar and the other components integrated into its design to be secure. Feel safe using it in all-weather types.

Scene

The camera is ideal for use in intelligent traffic management and for smart city businesses. It is capable of detecting traffic violations, capturing license plates, generating passing vehicle records, collecting traffic data, and detecting events.

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APPR numbers and letters Camera 1° 65-CMOS Vehicle Page Sensor 1° 65-CMOS Shutter Mode Single shutter; Double shutter; Three shutters Vehicle Type Recognitum Neither Mode, Nam, Recht	Technical Specificati	on		Adopts developed algorithms to recognize license plate
integer StrongiCoSCMDSWebbel Page Scapers, Policy Scapers, P	Technical Specification		ANPR	
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Manuacion Manualization Manualizatio	Day/Night	polarizing filter is used during the daytime, and switches		
number of the interval	Illuminator			
IP Solution Solution Illumination Distance 2 m-50 m (75.64 t-6.04 tr) (adjustable brightness) Side mount: 4 lanes Side mount: 4 lanes Si	Illuminator Number	16		
Illumination Distance 23 m-30 m (75.46 fr-164.04 ft) (digustable brightness) IR Covered Iane Center mount: 1 Almes Radar Center mount: 3 lanes Central Frequency 24 05 GHz-24.25 GHz Messurement Accuracy 23 m/h Speed Messurement Sm/h-300 km/h Tracking Target Valo 64 Lens Valo 64 Kachar Center Accuracy Messurement Skm/h-300 km/h Focal Length Motor Vehicle Valo Edition Kachar Valo 64 Max Aperture F15 Active Target Video Compression 8.108/h Mathemed Accuracy (Second Mathemed Accuracy (Secon	IR	850 nm		
IR Covered lane side mount: 3 lanes Side mount: 3 lanes Radar Radar Central Frequency 24.05 GHz-24.25 GHz Measurement Accuracy 12 km/h Speed Measurement 2 km/h-300 km/h Speed Measurement km/h-300 km/h Tracking Target Up to 64 Lens Video Compression Lens Notified Video	Illumination Distance	23 m–50 m (75.46 ft–164.04 ft) (adjustable brightness)		slow, crossing the solid white line, crossing the solid yellow line, illegal lane change, not wearing seatbelt, calling while driving, smoking while driving E-Police mode: Running a red light, wrong-way driving, crossing the solid white line, crossing the solid yellow line, disobeying the direction arrow, illegal left turn,
NoticeImage InformationImage InformationImage InformationCentral Frequency24.05 GHz-24.25 GHzMedianceModorcycle vehicleCaptures traffic Wolations including carrying passenger, rot waring helmet, and woring way drivingMeasurement2 km/h-300 km/hMotorcycle vehicleCaptures traffic Wolations including carrying passenger, rot waring helmet, and woring way drivingTracking Targetby to 64Traffic Flow DetectionGenerates statistics on which 6 Gway usele height, woring, and traffic coupersionLensImageMotorized vari focalVideoTraffic Flow DetectionGenerates statistics on which 6 Gway usele height, woring, and traffic coupersionKas Aperture15Motorized vari focalVideoMotorized vari focalMax. Aperture TypePirisVideo Compression4.065 x 2160; CIPID (3840 x 2160; 1080; 1290 x 1080; Video ResolutionVideo frame RateVideo frame RateField Of ViewPirisVideo trigger/Radar triggerVideo frame RateVideo frame RateVideo Statistical Main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x 2006; S120 kites Maximum 30 fps, default main stream (4006 x S120	IR Covered lane			
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Lens TypeMotorized vari-focalVideoLens TypeMotorized vari-focalVideo CompressionL265; H.264M; H.264H; MJPEGFocal Length16 mm-40 mmVideo ResolutionVideo ResolutionVideo ResolutionVideo N 1200; 720p (1280 × 720)Max. ApertureF1.5Sol Hist Maximum 30 (ps; default main stream (4096 × 2160); T20b (1280 × 1200); T20b (1280 × 720)2160/925 (ps); sub stream (1600 × 1200/925 (ps); sub stream (1600 × 1200/9	Tracking Target	Up to 64	Traffic Event	Detects parking violations of motor vehicles, wrong-way driving, and traffic congestion
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Max. Aperture F1.5 Aperture Type Piris Bield of View Piris Video Frame Rate S0 H2: Maximum 50 fps; default main stream (4096 x 2160@25 fps), sub stream (1600 x 1200@25 fps) 60 H2: Maximum 30 fps; default main stream (4096 x 224@15 fps), sub stream (1600 x 1200@25 fps) 60 H2: Maximum 30 fps; default main stream (4096 x 224@15 fps), sub stream (1600 x 1200@25 fps) Field of View Vietrical: 11.1"-25.4" Disponte 11.1"-25.4" Function H2.64: 32 kbps-32767 kbps H2.65: 23 kbps-32767 kbps Function Bit Rate Control OSD Overlay Time, location, lane (number/direction), plate (number/ color), and more. Alarm Event Sorage full, storage error, external alarm, no storage card, licens plate blocklist, liegal access, network disconnection, and IP conflict Auto Registration Yes Auto Registration Yes Intelligence image Target Detection Motor vehicle; motorcycle Face Detection Detects the driver and front-seat passenger of wehicles, and motorcycle drivers: extrats face images	Focal Length	16 mm-40 mm	Video Resolution	4096 × 2160; QFHD (3840 × 2160); 1080p (1920 × 1080);
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Field of View Vertical: 11.1*-25.4* Diagonal: 23.4*-51.7* Video Bit Rate L264: 32 kbps-32767 kbps MJPEG: 512 kbps-32767 kbps Function Function Bit Rate Control CBR; VBR OSD Overlay Time, location, lane (number/ color), and more. Bit Rate Control CBR; VBR Alarm Event Storage full, storage error, external alarn, no storage disconnection, and IP conflict HLC Ves Automatic Network Replenishment (ANR) Patform, FTP (TF card is required) Bad Pixel Correction Ves Intelligence ves Storage full, storage splate blockids, illegal access, network disconnection, and IP conflict Bad Pixel Correction Ves Intelligence ves Storage full, storage error, external alarn, no storage disconnection, and IP conflict Storage full, storage error, external alarn, no storage disconnection, and IP conflict Bad Pixel Correction Ves Auto Registration Ves Storage full, storage error, external alarn, no storage disconnection, and IP conflict Storage full, storage error, external alarn, no storage disconnection, and IP conflict Bad Pixel Correction Ves Auto Registration Ves Storage full, storage error, external fact many Storage full, storage error, external fact many Face Detection Motor vehicle; motorcycle Ves <td>Aperture Type</td> <td></td> <td>Video Frame Rate</td> <td>60 Hz: Maximum 30 fps; default main stream (4096 ×</td>	Aperture Type		Video Frame Rate	60 Hz: Maximum 30 fps; default main stream (4096 ×
Function Number of the second sec			Video Bit Rate	H.265: 32 kbps-32767 kbps
No. White Balance Auto/night/custom color temperature OSD Overlay Time, location, lane (number/ color), and more. White Balance Auto/night/custom color temperature Alarm Event Storage full, storage error, external alarm, no storage card, license plate blocklist, illegal access, network disconnection, and IP conflict HLC Ves Automatic Network Replenishment (ANR) Platform, FTP (TF card is required) Bad Pixel Correction Ves Auto Registration Yes Gain Scope 0–100 Intelligence image Supports combining up to 4 images into a composite image Face Detection Detects the driver and front-seat passenger of motor webicles, and motorcycle drivers: extracts face images Composite Image 4096 (H) × 2160 (V) (OSD black background is not			Bit Rate Control	
Color Overlaycolor), and more.Edge EnhancementYesAlarm EventStorage full, storage error, external alarm, no storage card, license plate blocklist, illegal access, network disconnection, and IP conflictHLCYesAutomatic Network Replenishment (ANR)Platform, FTP (TF card is required)BLCBad Pixel CorrectionAuto RegistrationYesGain Scope0-100Intelligenceimagecomposite ImageSupports combining up to 4 images into a composite imageFace DetectionDetects the driver and front-seat passenger of motor vehicles, and motorcycle drivers: extracts face imagesComposite ImageSupports combining up to 4 images into a composite image	Trigger Mode		White Balance	Auto/night/custom color temperature
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Face Detection Detects the driver and front-seat passenger of motor vehicles, and motorcycle drivers: extracts face images Image Resolution 4096 (H) × 2160 (V) (OSD black background is not	Target Detection	Motor vehicle; motorcycle	Composite Image	
	Face Detection	, –	Image Resolution	

DHI-ITC952-SU2F-PQE-C1R1-IRL8ZF1640

Image Encoding Format	JPEG			
Image Tampering Prevention	Watermark and verification are available for videos and images			
Network				
Network Port	1 × RJ-45 Ethernet port, 10/100/1000 M network transmission			
SDK and API	Yes			
Security	Authorized username and password, MAC address binding, HTTPS encryption, and network access control			
Protocol	IPv4; IPv6; HTTP; TCP; IP; UDP; NTP; DHCP			
Interoperability	ONVIF (Profile S/Profile G/Profile T)			
Browser	Microsoft Edge IE: IE9–IE11 Chrome: Chrome 41 and earlier Firefox: Firefox 49 and earlier For Win 10 users, run the browser as administrator			
Positioning	GPS			
Time Synchronization	NTP; GPS			
Port				
Frequency Source Sync	1, supports synchronizing the camera with the mains electricity			
Peripheral Light	5, optocoupler signal output (can be configured as flashing light or LED strobe sync output port, frequency adjustable)			
RS-485	1, connects to devices such as signal detector, strobe, and more			
Alarm Output	1 (can be configured as an alarm output port)			
Alarm In	1			
General				
Power Supply	100–240 VAC, 50 Hz/60 Hz			
Power Consumption	≤40 W			
Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)			
Storage Temperature	-40 °C to +70 °C (-40 °F to +154 °F)			
Operating Humidity	10%-90% (RH)			
Storage Humidity	10%-90% (RH)			
Product Dimensions	435.4 mm × 416.0 mm × 173.8 mm (17.14" × 16.38" × 6.84") (L × W × H)			
Certifications	CE: SHES221102111001; KSCR2211002258; KSCR221100225701 IP66: A2230003736101			
Net Weight	9.2 kg (20.28 lb)			
Gross Weight	14.2 kg (31.31 lb)			
Installation	Center mount; Side mount			

Ordering Information Model Туре Description DHI-ITC952-SU2F-PQE-C1R1-AI Enforcement 9MP all-in-one IR AI Traffic camera IRL8ZF1640 Camera Pole Mount Bracket PFA150 (purchase separately) Accessories (Optional) Wall Mount Bracket (purchase separately) 3012

Accessories

Optional:





PFA150 Pole Mount Bracket (purchase separately)

3012 Wall Mount Bracket (purchase separately)







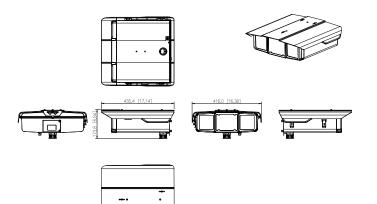








Dimensions (mm[inch])



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