

ITC413M-E5-F4-DC12

4MP Smart ANPR Camera



Series Overview

Leveraging its deep learning parking algorithms, the Smart ANPR Camera Module provides 24/7 monitoring, automatically detecting violations and capturing snapshots of both motor and non-motor vehicles. It extracts detailed vehicle attributes, including license plates, models, brands and colors. Additionally, it includes a range of signal communication ports that are specially designed to seamlessly interface with peripherals such as barriers, radars and illuminators, ensuring effortless control and enhanced operations. It is designed for installation at heights between 1 m and 1.8 m.

Functions

Remote Management and Maintenance

Supports connecting peripherals such as barriers and radars via RS-485, to monitor the device status in real time. This facilitates remote device management and maintenance, enhances debugging and operational efficiency, and reduces construction and maintenance costs.

Impressive Performance

The high-performance CPU processor extracts and analyzes information on motor and non-motor vehicles in real time, providing valuable information on their features. This information is useful for effective decision making.

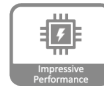
Vivid Images

With its intuitive CMOS image sensor, the camera has WDR, a high signal-to-noise ratio, and is highly sensitive, producing vivid images 24/7, making it ideal for use in the traffic industry.

- Leveraging its deep learning parking algorithms, the Smart ANPR Camera Module provides 24/7 monitoring, automatically detecting violations and capturing snapshots of both motor and non-motor vehicles.
- Extracts detailed vehicle attributes, including license plates, models, brands and colors through its third-generation deep learning parking algorithms.
- Includes a range of signal communication ports that are specially designed to seamlessly interface with peripherals such as barriers, radars and illuminators, ensuring effortless control and enhanced operations.
- Its lens can be adjusted along two axes.
- Supports filtering out false or low-confidence license plates such as printed license plates, photos containing only a license plate, and isolated license plate images.
- Designed for installation at heights between 1 m and 1.8 m.



Remote Management and Maintenance



Impressive Performance



Vivid Images

Scene

It is ideal for use at the entrances and exits of shopping malls, hospitals, schools, residential communities, office buildings and parking lots.

Technical Specification

Camera	
Image Sensor	1/2.9" CMOS
Pixel	4 MP
Image Resolution	2688 (H) × 1520 (V) (This resolution does not account for the OSD black border.)
Electronic Shutter Speed	Auto/Manual 1/25 s–1/10,000 s
Max. Detection Speed	30 km/h
ROM	4 GB
RAM	1 GB
S/N Ratio	39.03 dB
Scanning System	Progressive scanning

Lens	
Focal Length	3.6 mm
Field of View	3.6 mm: H: 74.3°–29°; V: 40.9°–16°; D: 86.7°–34°
Focus Control	Manual
Number of Lens	1
Lens Type	Fixed-focal

Video	
Video Resolution	Main stream: 4MP (2688 × 1520); 1080p (1920 × 1080); 720p (1280 × 720) Sub stream: 720p (1280 × 720); 960H (960 × 576); D1 (704×576); CIF (352×288)
Video Frame Rate	PAL: Main stream (2688 × 1520@25 fps, 1920 × 1080@25 fps, 1280 × 720@25 fps), Sub stream (1280 × 720@25 fps, 960 × 576@25 fps, 704 × 576@25 fps, 352 × 288@25 fps) NTSC: Main stream (2688 × 1520@30 fps, 1920 × 1080@30 fps, 1280 × 720@30 fps), Sub stream (1280 × 720@30 fps, 960 × 576@30 fps, 704 × 576@30 fps, 352 × 288@30 fps)
Video Compression	H.265;H.264B;H.264M;H.264H;MJPEG
Video Bit Rate	H.264B: 2,179 kbps–13,074 kbps; H.264M: 2,179 kbps–13,074 kbps; H.264H: 2,179 kbps–13,074 kbps; H.265: 2,179 kbps–13,074 kbps; MJPEG: 6,537 kbps–39,223 kbps
Scene Self-adaptation (SSA)	Yes
Gain Control	Manual; Auto
Noise Reduction	3D NR
Region of Interest (RoI)	Yes, 3
Image Tampering Prevention	Yes. Watermarks can be added to videos and images. The watermark can also be verified.
Privacy Masking	Yes
Bit Rate Control	VBR;CBR

Network	
Network Protocol	HTTP;HTTPS;TCP/IP;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDNS;IPv6;802.1x;FTP;ICMP;SNMP;IGMP;RTP;PPPoE;WebSocket;SSL/TLS

API	Yes
SDK	Yes
Interoperability	CGI;P2P;ITSAPI;ONVIF (Profile M & Profile S & Profile T)
Security Mode	Username and password; MAC address; HTTPS; IEEE 802.1x; network access control
Browser	With plug-ins, it supports IE 9, 10 and 11, Firefox 52 and earlier versions, and Chrome 42 and earlier versions. Without plug-ins, it supports Chrome 92 and later versions.

Image	
Image Encoding Format	JPEG
Image Setting	Brightness; Contrast; Saturation; Gamma; Sharpness; Gain; White Balance
Day/Night	Features IR filter and 3 modes: color, black and white and auto.
WDR	> 100 dB (image)
White Balance	Auto;Manual;Regional Custom;Outdoor;Natural;Street Lamp
OSD Overlay	Supports overlay of time; address (position of channel), lane (number/direction), plate (number and color), vehicle (color, model)

Audio	
Audio Port	Yes

Port	
Audio Input	1 channel (terminal)
Audio Output	1 channel (terminal)
Network Port	1, 100 Mbps Ethernet port (RJ-45)
Storage	TF card slot
Alarm Input	2-channel opto-isolated input (digital quantity)
Alarm Output	2-channel relay output, which can connect to devices such as barriers
RS-485	2 (connecting the barriers, radars, and other peripheral devices, and supporting adjusting remote configuration and viewing operation status)
Reset Button	Yes

Performance	
Maximum Number of Passed Vehicles	10000
Max. Number of Connections	20

Function	
Storage	FTP; Built-in 1 TF card port
Restricted List/Trusted List	Blocklist: 110,000 Allowlist: 110,000
Capture Distance	2.5 m–6 m (8.20 ft–19.69 ft)
Detected Width	4 m (13.12 ft)

Intelligence

AI Recognition	Recognizes the models, brands, colors and license plates of vehicles. It also recognizes vehicles that do not have license plates.
Video Metadata	Yes
Vehicle Brand	Recognizes 147 vehicle brands
Vehicle Color	Recognizes 12 colors, including gray, black, white, silver, blue, green, purple, red, orange, pink, brown, and yellow
Vehicle Type Recognition	Recognizes 10 vehicle models, including large bus, heavy truck, medium truck, sedan, van, light truck, medium bus, SUV, MPV, and pickup
Country and Region Supported by ANPR	Baseline support: 10 options (85 countries) General: Supports universal characters GCC (U.A.E., Saudi Arabia, Morocco, Oman, Iraq, Egypt, Jordan, Qatar, Kuwait, Bahrain, Lebanon) South Africa: South Africa, Tanzania, Mozambique, Zambia, Uganda, Equatorial Guinea, Mauritius, Kenya South Asia Region (India Region) : India, Maldives Europe (Netherlands, France, Germany, Britain, Italy, Poland, Belgium, Bulgaria, Serbia, Slovakia, Spain, Denmark, Turkey, Israel, Czech Republic, Bosnia and Herzegovina, Switzerland, Austria, Hungary, Romania, Lithuania, Latvia, Sweden, Estonia, Portugal, Greece, Slovenia, Luxembourg, Palestine, Lebanon, Ireland, Finland, Norway, Croatia, North Macedonia) South American Economies Collection (Uruguay, Paraguay, Brazil, Argentina, Chile, Colombia, Peru, Ecuador, Guyana, Bolivia) Mexico and other countries: Mexico, Costa Rica, Curacao, Guatemala Eurasian Collection (Russia, Ukraine, Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, Moldova, Georgia, Azerbaijan, Turkmenistan) North America (United States, Canada) North Africa Region Collection: Tunisia, Morocco, Algeria, Libya The baseline algorithm is supported for the following 19 countries: Republic of Korea, Indonesia, Singapore, Cambodia, Australia, Thailand, Brazil, Nigeria, Pakistan, Viet Nam, Mongolia, Bangladesh, Myanmar, Philippines, Laos, Iraq, Japan, Maldives, Nepal
Capture Rate	When used according to the recommended installation requirements and lighting conditions, the vehicle capture rate ≥ 99%
Recognition Rate	When used according to the recommended installation requirements and lighting conditions, the recognition rate for vehicles departing in the assigned direction≥ 96%, and the recognition rate for European vehicle plates ≥ 98%

General

Power Supply	12 VDC
Power Consumption	< 6 W
Product Dimensions	120.0 mm × 117.7 mm × 71.4 mm (4.72" × 4.63" × 2.81") (L × W × H)
Packaging Dimensions	188.0 mm × 187.0 mm × 119.0 mm (7.40" × 7.36" × 4.69") (L × W × H)
Net Weight	271.0 g (0.60 lb)
Gross Weight	530.0 g (1.17 lb)
Storage Humidity	≤95% (RH), non-condensing
Storage Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Operating Temperature	−30 °C to +65 °C (−22 °F to +149 °F)

Operating Humidity	10%–90% (RH), non-condensing
Certifications	CE

Ordering Information

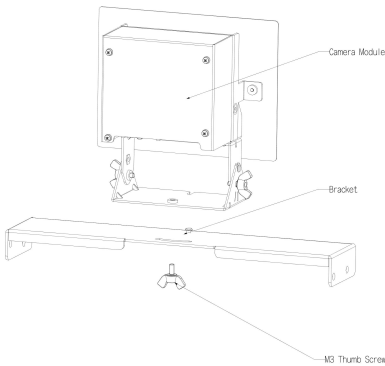
Type	Model	Description
Smart ANPR Camera	ITC413M-E5-F4-DC12	4MP Smart ANPR Camera
Accessories (Optional)	IPMECL-C1	LED Continuous Lamp

Accessories

Optional:



IPMECL-C1
LED Continuous Lamp



Dimensions (mm[inch])

