

DHI-ITC514-PH6D-Q20-F36-POE

Dahua 5MP Spot Detection Camera



Series Overview

The ITC514-PH6D-Q20 series Parking Space Detection Camera integrate dual-lens parking management, supporting the recognition of vehicles, license plates, vehicle types, and colors. The parking channel can monitor up to 12 parking spaces or recognize 8 parking spaces & license plates, and it supports the detection of illegal parking, fire and smoke, unauthorized occupation by foreign object, vehicle line infringement, unauthorized list occupancy, and small vehicles occupying large vehicle spaces. The lens angles can be adjusted manually in three axes. The device features built-in 7-color indicator lights and a speaker, allowing for configurable indicator colors to guide parking status, and alarm events can be configured for visual and audible warnings.

Functions

Real-time Monitoring of Parking Space Status

The built-in deep learning algorithms help the device monitor the status of parking spaces, and recognize license plates through videos in real time.

Seven-color Indicator

The device comes with a built-in indicator that can display the status of parking spaces in different colors.

WDR

Using advanced Wide Dynamic Range (WDR) technology, the device captures highly detailed images in high-contrast lighting conditions, making it suitable for semi-closed parking lots.

Sound and Light Alarm

Detects a variety of events, triggering sound and light alarms. It can recognize when vehicles are parked over the parking line, unauthorized vehicles are parked in reserved parking spaces, and a small vehicle is in the parking space of a large vehicle. The sound alarm can be customized and its volume adjusted.

- Ideal for parking space status detection and plate number recognition, and it connects to the intelligent parking lot management system.
- Features illegal parking detection, smoke detection, unauthorized occupation, line crossing detection, sound and light alarms, and detects spaces that are being occupied by non-allowlist vehicles.
- In parking space mode, it can monitor up to 12 parking spaces in real time. The detection rate is higher than 99.5%. In license plate mode, it can monitor up to 8 parking spaces & license plates in real time. The detection rate is over 99.5%, and the recognition rate for European vehicle plates is over 98%.
- Offers 7 colors for indicating the parking status.
- Included RS-485 port for connecting external indicators. One indicator is assigned to each parking space.
- H.265 codec that supports high compression ratio and ultra-low bit rate.
- Supports H.264, H.265, and MJPEG flexible coding, and is applicable to various bandwidth and storage environments.
- Supports True WDR, 3D NR, HLC, BLC, and digital watermarking, and is suitable for indoor parking lots.
- PoE power supply and 12–48 VDC.
- The lens angle can be freely adjusted manually.

Manual Adjustment of Lens Angle

The lens angle can be manually adjusted up and down, left and right, and can also be rotated, making it suitable for a variety of scenes.

PoE Input

Supports supplying power and transmitting signals through a gigabit PoE cable.

Scene

Suitable for indoor parking lots and semi-enclosed parking garages.

Technical Specification

Basic

Image Sensor	1/2.7" CMOS				
Max.Detection Spot	Parking space detection:12 Parking space detection+ License Plate recognition: 8				
Indicator Light	1, 7 customizable colors (red, yellow, blue, green, cyan, white, and pink)				
Electronic Shutter Speed	Auto/Manual 1/25 s–1/10,000 s				
Pixel	5 MP				
Image Resolution	2880 (H) × 1620 (V) (OSD black background is not calculated in the pixels)				
Video Resolution	5 MP (2880×1620); 1080p (1920 × 1080); 720p (1280 × 720)				
Noise Reduction	3D NR				
WDR	100 dB				
White Balance	Auto; Outdoor; Partial white balance; Manual; Natural; Street lamp				
Video Compression	H.265; H.264M; H.264H; H.264B; MJPEG				
Image Encoding Format	JPEG				
Video Bit Rate	H.264: 2,488 kbps–30,720 kbps; H.265: 2,488 kbps–30,720 kbps; MJPEG: 7,465 kbps–30,720 kbps				
Video Frame Rate	PAL: Main stream (1920 × 1080@25 fps, 1280 × 720@25 fps), sub stream (704 × 576@25 fps)				
Edge Enhancement	Yes				
Exposure Mode	Auto; Manual (Select from shutter values or customize shutter range)				
Field of View	Channel 1(Parking Space): H: 90.3°; V: 47.8°; D: 108.6° Channel 2(Parking Space): H: 90.3°; V: 47.8°; D: 108.6°				
Lens Angle	Vertical adjustable (depression angle of 43°–0°) Horizontal adjustable (from left 20° to right 20°) 20° clockwise to 20° counterclockwise				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Channel 1 (Parking Space)	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)
	Channel 2 (Parking Space)	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)
Built-in Speaker	Yes, built-in speaker				

Function

Security	Username and password authorization; MAC address binding; HTTPS encryption; IEEE 802.1x; network access control
Shutter Mode	Single shutter
OSD Overlay	Time; address; parking space No.; parking space status; plate number; vehicle model; vehicle logo and color
Alarm Event	Illegal access, security error and other events
Auto Registration	Yes
Image Tampering Prevention	Yes. Watermarks can be added to videos and images for verification.

Voice Broadcast	Voice broadcast (adjustable volume and customizable content)
Network Protocol	HTTPS; DHCP; NTP; TCP/IP; RTSP;HTTP
API	Yes
SDK	Yes
Interoperability	ONVIF (Profile S & Profile G & Profile T); CGI; ITSAPI

Intelligence

Vehicle Recognition	In the recommended installation and lighting condition, recognizes vehicle model, logo, color, and plate number, and collects metadata for unlicensed vehicles. Vehicle recognition rate is over 99.5%, and the recognition rate for European vehicle plates is over 98% .
Parking Spot Status Detection	Yes, indicator color is customizable
Illegal Parking Detection	Detects illegal parking events including vehicle occupying two parking spaces, non-allowlist vehicle occupying a parking space, small vehicle parked in a large vehicle's space and parking in a restricted area.
Non-motor Vehicle Detection	Supports the detection of non-motor vehicle occupancy.
Capture Triggered by Unlicensed Vehicle	Yes
Smoke and Fire Detection	Supports fire and smoke detection.
Unauthorized Occupation	Detects non-motor vehicles, traffic cones, shopping carts and no parking signs.

Port

RS-485	1
Network Port	1 × RJ-45 Ethernet port, 100/1000 Mbps network transmission
Power Output	12 VDC ± 10% voltage output, ≤ 0.4 A current output

General

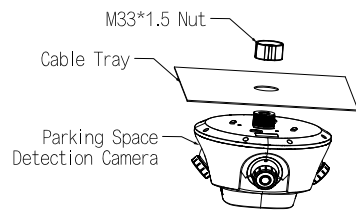
Power Supply	12–48 VDC; PoE+ (802.3at)
Power Consumption	<24 W
Operating Temperature	–30 °C to +50 °C (–22 °F to +122 °F)
Storage Temperature	–35 °C to +55 °C (–31 °F to +131 °F)
Operating Humidity	10%–95% (RH), non-condensing
Storage Humidity	10%–95% (RH), non-condensing
Protection	IP54
Anti-corrosion Level	Basic Protection
Product Dimensions	200.0 mm × 202.4 mm × 131.2 mm (7.87" × 7.97" × 5.17") (L × W × H)
Packaging Dimensions	250 mm × 250 mm × 200 mm (9.84" × 9.84" × 7.87") (L × W × H)
Net Weight	0.97 kg (2.14 lb)
Gross Weight	1.71 kg (3.77 lb)
Installation	Ceiling mount; bracket mount
Lens	Included
Lens Type	Fixed-focal
Focal Length	Channel 1(Parking Space): 3.6 mm Channel 2(Parking Space): 3.6 mm

Ordering Information

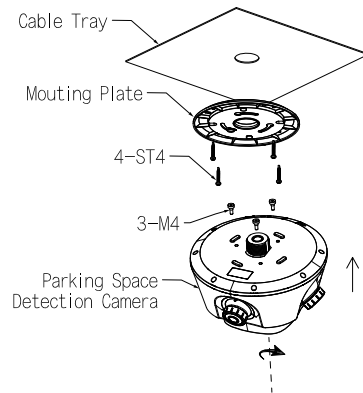
Type	Model	Description
Parking Space Detection Camera	DHI-ITC514-PH6D-Q20-F36-POE	Dahua SMP Spot Detection Camera

Installation

Installation Method 1



Installation Method 2



Dimensions (mm [inch])

