DH-IPC-PTS2649C-3E3Z-4GB20

3+3MP WizColor Hybrid-zoom PT 4G Solar Power Network Camera



- Displays videos in two channels at the same time
- 1/2.8" 3Megapixel CMOS
- WizColor technology
- 6x hybrid zoom
- Two-way talk
- SMD3.0
- Siren and Light Active Deterrence
- Auto Tracking Lite
- Supports AOV mode
- 4G Connection
- Built-in 65Wh high-capacity ternary lithium battery
- Supports Type-C power supply
- Supports manual adjustment of fixed lens (Vertical:-7° to 20°)
- IP66



System Overview

Driven by industry-leading technology, Dahua Wireless Series network cameras are highly precise and easy to install, producing high-quality images. They have strong wireless connection capabilities and do not require network cables, eliminating the need for a professional construction team. This series of cost-effective cameras supports local storage and is dustproof and waterproof. It is ideal for small and medium-sized scenes such as retail stores, homes, and other small and medium-sized enterprises.

Functions

AOV (Always-On Video) Mode

AOV (Always-On Video) technology offers a low power consumption solution that enables 24/7 video recording. Equipped with advanced AI algorithms, the camera can be woken up to perform detection even at long distances. During inactive periods, it records at a low frame rate and seamlessly escalates to a high frame rate when an event is detected, ensuring smooth and continuous video recordings.

Two-way Talk

With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

SMD 3.0

Empowered by deep-learning algorithms, Dahua SMD filters out motion detection alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

AI-ISP

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

4G

With a built-in high-performance 4G mobile network module, the camera can be directly registered to cloud platforms after a 4G SIM card has been inserted into it. It can be installed anywhere without the hassle of network cables. Users can perform real-time monitoring and remote control of the camera from a mobile client through 4G network.

Smart Hybrid Zoom

By integrating multiple sensors with various fixed lenses, this camera delivers exceptional zoom performance. When the built-in AI algorithm detects a human, the lens automatically zooms in, tracks the target's movement, and effortlessly captures both close-up and distant scenes for precise monitoring.

Tap and View

Easy to use, you can tap on any spot in the live video feed from the fixed lens, allowing the PT lens to instantly rotate and focus on your selected area, delivering a clear close-up view of the target.

Technical Specification

Camera

Image Sensor	Fixed Lens: 1/2.8" CMOS PT Lens: 1/2.8" CMOS
Pixel	Fixed Lens: 3 MP PT Lens: 3 MP
Max. Resolution	Fixed Lens: 2304 (H) × 1296 (V) PT Lens: 2304 (H) × 1296 (V)
ROM	256 MB
RAM	256 MB
Scanning System	Progressive
Min. Illumination	Fixed Lens: 0.0005 lux@F1.0 (Color, 30 IRE); 0 lux (Illuminator on) PT Lens: 0.0005 lux@F1.0(Color, 30 IRE); 0 lux (Illuminator on)
Illumination Distance	Fixed Lens: 30 m (98.43 ft) (Warm light) PT Lens: 50 m (164.04 ft) (Warm light)
Illuminator On/Off Control	Fixed Lens: Manual; Auto; Off PT Lens: Manual; Auto; Off
Illuminator Number	Fixed Lens: 4 (Warm light) PT Lens: 4 (Warm light)

Lens

Focal Length	Fixed Lens: 2.8 mm PT Lens: 3.6 mm; 8.4 mm
Max. Aperture	Fixed Lens: F1.0 PT Lens: 3.6 mm: F1.0; 8.4 mm: F1.0
Field of View	Fixed Lens: H: 93.5°; V: 51.9°; D: 110.1° PT Lens: 3.6 mm: H: 81.5°; V: 44.3°; D: 96.3° 8.4 mm: H: 15.1°; V: 8.4°; D: 17.8°
Close Focus Distance	Fixed Lens: 1.1 m (3.61 ft) PT Lens: 3.6 mm: 1.7 m (5.58 ft); 8.4 mm: 6 m (19.69 ft)

DORI Distance

Lens	Detect	Observe	Recognize	Identify
2.8 mm	40 m (131.23 ft)	15.8 m (51.84 ft)	8 m (26.25 ft)	4 m (13.12 ft)
3.6 mm	51.43 m (168.73 ft)	20.31 m (66.65 ft)	10.29 m (33.75 ft)	5.14 m (16.87 ft)
8.4 mm	120 m (393.7 ft)	47.4 m (155.51 ft)	24 m (78.74 ft)	12 m (39.37 ft)

*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/ project design tool.

PTZ

Pan/Tilt Range	Fixed Lens: Pan: 0° to 210°; Tilt: -7° to +20° (manual) PT Lens: Pan: 0° to 350°; Tilt: 0° to +90° (Electric)
Manual Control Speed	Pan: 40°/s; Tilt: 40°/s
Preset Speed	Pan: 40°/s; Tilt: 40°/s
Preset	50
Tour	8 (up to 32 presets per tour)
Power-off Memory	Yes

Smart Event

Human Detection	Yes
Vehicle Detection	Yes

Intelligence

Smart Tracking	Auto tracking lite Linkage tracking
SMD	SMD 3.0

Active Deterrence

Light Warning	White light warning
Sound Warning	Offers 3 sound alarm. Sound can be set from 1-100. Play times can be set from 1-10.

Video

Video Compression	Smart H.265+
Streaming Capability	1 stream
Resolution	Fixed Lens: 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); 640 × 360 (640 × 360) PT Lens: 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); 640 × 360 (640 × 360)
Video Frame Rate	Fixed lens:Main stream: 3M/1080p/720p/640 × 360@ (15 fps) PT lens:Main stream: 3M/1080p/720p/640 × 360@ (15 fps)
Bit Rate Control	VBR
Video Bit Rate	H265: 54 kbps–1280 kbps
WDR	Fixed Lens: DWDR PT Lens: DWDR
White Balance	Auto
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	Yes
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Built-in MIC	Yes
Built-in Speaker	Yes

Network

Carrier Network System	4G
Wireless Carrier Frequency Band	EAU/EUR: LTE-FDD: B1/B3/B5/B7/B8/B20/B28 LTE-TDD: B38/B40/B41 LA: LTE-FDD: B2/B3/B4/B5/B7/B8/B28/B66 LTE-TDD: B38/B40/B41

Max. Transmission Power	4G: Power class3: 23 dBm ± 2.7 dB
Storage	Micro SD card (512 GB)
Management Software	DMSS
Mobile Client	Android;iOS

Certification

Certifications	CE: EN 55032/EN 55035/EN 50130-4/EN 61000-3/EN 62368-1/EN 301489

Port

Audio Input	1 channel (built-in mic)
Audio Output	1 channel (built-in speaker)
Alarm Linkage	warning light; audio
Alarm Event	Motion detection; human detection; vehicle detection

Power

Power Supply	Power supply: Built in 65Wh lithium battery Comes with 8 W solar panel Charging: USB Type-C (Supports QC2.0)
Power Consumption	Super Power Saving Mode: 40 mW (4G keep-alive) AOV Mode: 170 mW (1 frame every 2 seconds, SD card recording, 4G keep-alive) Performance Mode 1: 2.4 W (4G streaming, SD card recording, PTZ static, illuminator off) Performance Mode 2: 3.7 W (4G streaming, SD card recording, PTZ static, illuminator on) Maximum Power Consumption: 8.0W (4G streaming, SD card recording, PTZ moving, illuminator on, speaker on)
Power Adapter	Optional
Battery Capacity	65 Wh

Environment

Operating Temperature	The unit device: Operating Temperature: –20 °C to +60 °C (–4 °F to +140 °F) Battery: Charging Temperature: –10 °C to +50 °C (+14°F to +122 °F) (The solar panel heating the battery first, and charging begins once the battery is heated to 0 °C) Discharging Temperature: –20 °C to +60 °C (–4 °F to +140 °F)
Operating Humidity	≤95%
Protection	IP66; TVS 2000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	223.2 mm × 130.0 mm × 215.0 mm (8.79" × 5.12" × 8.46") (L × W × H)
Net Weight	1.8 kg (3.97 lb)
Gross Weight	2.5 kg (5.51 lb)

Filter

Remarks	The precision of the presets for PTZ cameras might vary depending on different series. For scenes with high requirements on the precision, contact your local sales representative for assistance with selecting the model.

Ordering Information

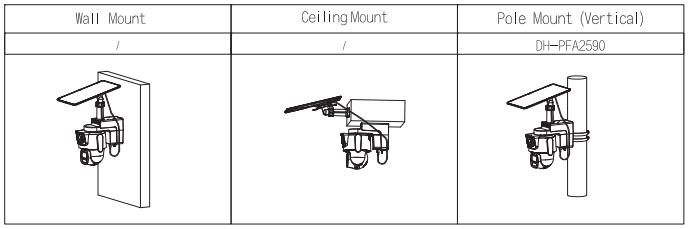
Type	Model	Description
Network PTZ Camera	DH-IPC-PTS2649C-3E3Z-4GB20	3+3MP WizColor Hybrid-zoom PT 4G Solar Power Network Camera
Accessories	PFA2590	Pole Mount Bracket

Accessories

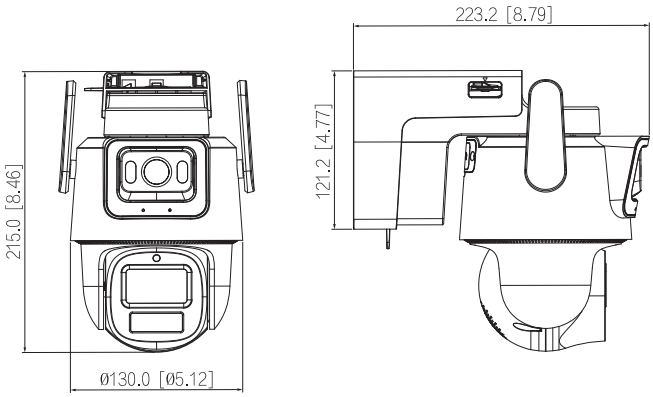
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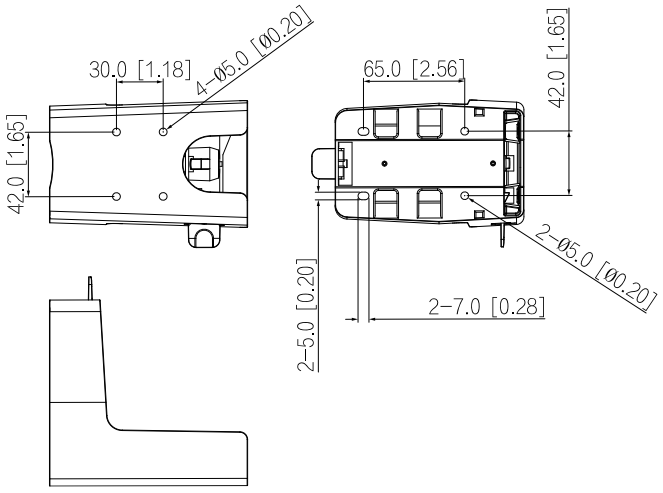


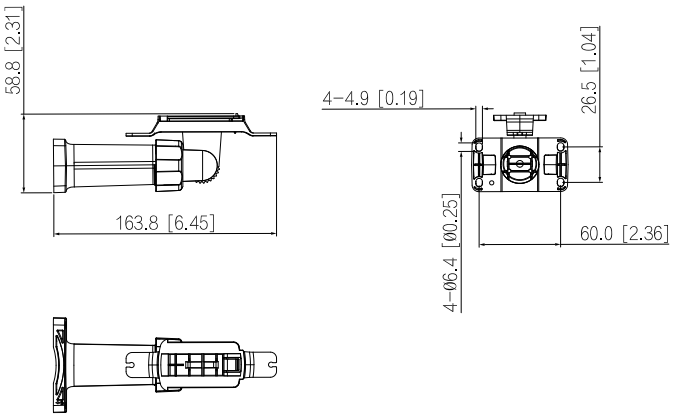
PFA2590
Pole Mount
Bracket

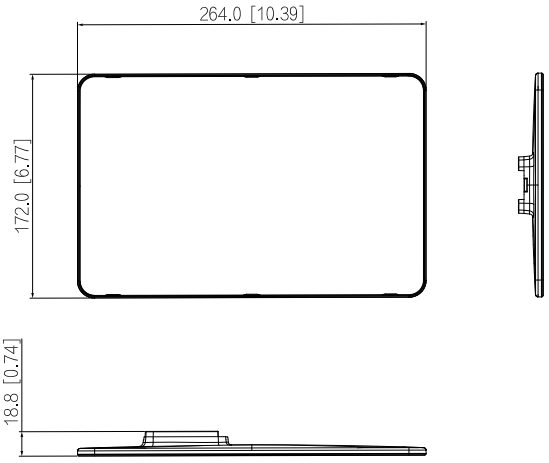


Dimensions (mm[inch])









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