

IPC-EB2449TM-ILM-2.8

4MP Smart Dual Illumination Fixed-focal Eyeball WizSense Network Camera



Blue | Line Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

System Overview

With advanced deep learning algorithm, WizSense 2 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

Smart Dual Illuminators

Smart Dual Illuminators technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

SMD Plus

With intelligent algorithm, Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

Perimeter Protection

With deep learning algorithm, Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion) are largely reduced.

- 4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 4 MP (2688 × 1520)@20 fps, and supports 2560 × 1440 @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light/IR LED, the max. illumination distance is 30 m and the max. warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Supports max. 256 G Micro SD card; built in MIC.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- SMD Plus.



Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Full-color

With high-performance sensor and large aperture lens, Full-color technology can display clear colorful image in the environment of ultra-low illuminance. With this photosensitivity technology, the camera can capture more available light, and display more colorful image details.

Cyber Security

Network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Protection (IP67, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

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Technical Specification

| | |
|----------------------------|---|
| Camera | |
| Image Sensor | 1/2.9" CMOS |
| Max. Resolution | 2688 (H) × 1520 (V) |
| ROM | 128 MB |
| RAM | 128 MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100,000 s |
| Min. Illumination | 0.008 lux@F1.6 (Color, 30 IRE) 0.0008 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on) |
| S/N Ratio | >56 dB |
| Illumination Distance | 30 m (98.43 ft) (IR), 30 m (98.43 ft) (Warm light) |
| Illuminator On/Off Control | Auto; Manual |
| Illuminator Number | 1 (IR LED); 1 (Warm light) |
| Pan/Tilt/Rotation Range | Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360° |

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|----------------------|---|--------------------|--------------------|-------------------|------------------|
| Lens | | | | | |
| Lens Type | Fixed-focal | | | | |
| Lens Mount | M12 | | | | |
| Focal Length | 2.8 mm; 3.6 mm | | | | |
| Max. Aperture | F1.6 | | | | |
| Field of View | 2.8 mm: H: 95°; V: 52°; D: 114° 3.6 mm: H: 78°; V: 41°; D: 94° | | | | |
| Iris Control | Fixed | | | | |
| Close Focus Distance | 2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (5.25 ft) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 2.8 mm | 63.6 m (208.66 ft) | 25.4 m (83.33 ft) | 12.7 m (41.67 ft) | 6.4 m (20.99 ft) |
| | 3.6 mm | 85.4 m (280.18 ft) | 34.2 m (112.20 ft) | 17.1 m (56.10 ft) | 8.5 m (27.89 ft) |

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| Intelligence | |
| IVS (Perimeter Protection) | Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human) |
| Smart Search | Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos |

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|-------------------|---|
| Video | |
| Video Compression | H.264H; H.265; H.264; H.264B; MJPEG (Only supported by the sub stream) |
| Smart Codec | Smart H.265+; Smart H.264+ |
| Video Frame Rate | Main stream: 2688 × 1520@(1–20 fps)/2560 × 1440@(1–25/30 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity. |

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| Stream Capability | 2 streams |
| Resolution | 4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Bit Rate Control | CBR/VBR |
| Video Bit Rate | H.264: 32 kbps–6144 kbps H.265: 12 kbps–6144 kbps |
| Day/Night | Auto(ICR)/Color/B/W |
| BLC | Yes |
| HLC | Yes |
| WDR | 120 dB |
| White Balance | Auto; natural; street lamp; outdoor; manual; regional custom |
| Gain Control | Auto; Manual |
| Noise Reduction | 3D NR |
| Motion Detection | OFF/ON (4 areas, rectangular) |
| Region of Interest (RoI) | Yes (4 areas) |
| Image Rotation | 0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower) |
| Mirror | Yes |
| Privacy Masking | 4 areas |

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|-------------------|-----------------------------|
| Audio | |
| Built-in MIC | Yes |
| Audio Compression | G.711a; G.711Mu; PCM; G.726 |

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|-------------|---|
| Alarm | |
| Alarm Event | No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; voltage detection; security exception; SMD |

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|---------------------|--|
| Network | |
| Network Port | RJ-45 (10/100 Base-T) |
| SDK and API | Yes |
| Network Protocol | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; NTP; Multicast; ICMP; IGMP |
| Interoperability | ONVIF (Profile S/Profile T); CGI; P2P; Milestone |
| User/Host | 6 (Total bandwidth: 36 M) |
| Storage | FTP; SFTP; Micro SD card (support max. 256 GB) |
| Browser | IE Chrome Firefox |
| Management Software | DSS; DMSS |
| Mobile Client | iOS; Android |
| Cyber Security | Configuration encryption; Trusted execution; Digest; Security logs; WSSE; Account lockout; syslog; Video encryption; 802.1x; IP/MAC filtering; HTTPS; Trusted upgrade; Trusted boot; Generation and importing of X.509 certification |

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Certification

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|----------------|--|
| Certifications | CE-LVD: EN 62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B |
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Power

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|-------------------|--|
| Power Supply | 12 VDC/PoE (802.3af) |
| Power Consumption | Basic: 2.1 W (12 VDC); 2.5 W (PoE) Max. (H.265 + intelligence on + WDR + warm light): 4.4 W (12 VDC); 5.2 W (PoE) |

Environment

| | |
|-----------------------|--------------------------------------|
| Operating Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
| Operating Humidity | ≤95% |
| Storage Temperature | -40 °C to +60 °C (-40 °F to +140 °F) |
| Protection | IP67 |

Structure

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|--------------------|---|
| Casing Material | Inner core: Metal; Cover: Metal; Decoration ring: Plastic |
| Product Dimensions | 99.1 mm × Φ121.9 mm (3.90" × Φ4.80") |
| Net Weight | 0.46 kg (1.01 lb) |
| Gross Weight | 0.65 kg (1.43 lb) |

Accessories

Optional:



PFA130-E
Junction
Box



PFB205W-E
Wall Mount
Bracket



PFA152-E
Pole Mount
Bracket



PFA109
Mount
Adapter



PFB220C
Ceiling Mount
Bracket



W-T1000
12V DC 1A
Power Adapter

Ordering Information

| Type | Model | Description |
|---------------------------|----------------------|---|
| 4MP camera | IPC-EB2449TM-ILM-2.8 | 4MP Smart Dual Illumination Fixed-focal Eyeball WizSense Network Camera |
| Accessories (Optional) | PFA130-E | Junction Box |
| | PFB205W-E | Wall Mount Bracket |
| | PFA152-E | Pole Mount Bracket |
| | PFA109 | Mount Adapter |
| | PFB220C | Ceiling Mount Bracket |

Dimensions (mm[inch])



