

BL-855P48D-S8-AD ZKBio Sense Series

5 MP Smart Hybrid Light Active Deterrence Motorized Vari-focal Bullet IP Camera





Human Vehicle



Motion Detection





Target Counting

Line Crossing



Object Left/Lost

Active Deterrence

- 1/2.7" 5 MP CMOS Sensor
- H.265 dual streams encoding
- High-quality optical lens: 2.8 to 12 mm
- 80 m IR / 30 m white light effective range
- Smart hybrid light (white light and IR)
- Active Deterrence Function
 - Strobe light (red and blue)
 - Audio alert (embedded speaker)
- 120 dB True WDR
- Built-in speaker and microphone
- Built-in micro-SD card slot (support max. 256 GB)
- Embedded intelligent classification algorithm based on computer vision technology
- Multiple intelligent video analytic features supported
- Support multiple browsers web client, and compatible with ZKBio CVSecurity
- Remote viewing with mobile application and platform software
- Lightning protection up to 6 KV
- Metal casing design and reached IP67 protection rating standard for waterproof and dust proof

Product OverView

ZKBio Sense series active deterrence IP cameras are the front-end cameras of intelligent video surveillance solution released by ZKTeco based on the Deep-Learning algorithm and Computer Vision technology.

Using an advanced and powerful CPU, coupled with the embedded intelligent classification algorithm, ZKBio Sense series active deterrence IP cameras can accurately detect and recognize 3 key types of targets: humans, vehicles and objects. Meanwhile, they can effectively filter out objects to avoid false alarms. More importantly, the series IP cameras feature smart hybrid light, red / blue strobe light, and audio alert to provide an active deterrent warning.

ZKBio Sense series active deterrence IP cameras greatly improve the efficiency and safety of the entire video surveillance system, which can be widely used in different scenarios, such as smart school, office, industrial park, community, etc.

Core Features

Active Deterrence

ZKBio Sense series active deterrence IP cameras support active deterrence with built-in strobe light and speaker to warn intruders off. With the smart hybrid light, ZKBio Sense IP Cameras offer colorful video images for alarm triggering events.

IVA (Intelligent Video Analytics)

ZKBio Sense series active deterrence IP cameras support multiple intelligent video analytic functions: Target Counting, Object Lost/Left, Line Crossing, Area Detection, and Smart Motion Detection, which are based on human and vehicle targets classification.

H.265 HEVC

H.265 is an evolutionary optimization of the traditional H.264, it includes a series of encoding strategy such as ROI, smart 2D/3D noise reduction, etc. Delivering high quality video with up to 70% lower bandwidth.

True WDR

Powered by ZKTeco's powerful ISP algorithm and high-quality sensor, ZKBio Sense series active deterrence IP cameras are built-in with true WDR feature, which can present excellent picture images in extreme contrast lighting environments.

ANR

When the network between ZKBio Sense series active deterrence IP cameras and ZKBio Sense series NVRs is interrupted, videos can be automatically saved on the SD card of the front end, and then uploaded to the back end after the network is restored, so as to avoid video loss.

Protection

With precise mechanical and rugged metal casing design, ZKBio Sense series active deterrence IP cameras can stand against water and dust with IP67 protection rating, and support to work in various harsh outdoor environments such as temperature range -30 °C to +60 °C, etc.

Technical Specification

| Camera | | | |
|--|---|--|--|
| Model | BL-855P48D-S8-AD | | |
| Image Sensor | 1/2.7" 5 MP CMOS Sensor | | |
| Max. Resolution | 2592 (H) × 1944 (V) | | |
| ROM | 128 MB | | |
| RAM | 256 MB | | |
| Scanning System | Progressive Scan | | |
| Electronic Shutter Speed | 1/5 s to 1/100,000 s | | |
| Min. Illumination | 0.001 Lux @ F1.4 to 2.8 (AGC on, Color) 0 Lux (IR on, B & W) | | |
| S/N Ratio | > 52 dB | | |
| IR Range | 80 m | | |
| White Light Range | 30 m | | |
| Illuminator On/Off Control | Auto / Manual | | |
| Smart Hybrid Light | 4×IR/White Light LED | | |
| Strobe Light (Active Deterrence Function) | 1 × Red / Blue Strobe LED | | |
| Smart IR | Support | | |
| Angle Adjustment for Installation | Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360° | | |
| TV System | PAL / NTSC | | |
| Image Settings | Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gamma, Backlight mode, adjustable by platform software or web browser | | |
| Software Reset Default | Support | | |
| General Function | Heartbeat, Mirror, Privacy mask, Log, Password reset | | |
| Lens | | | |
| Lens Type | Motorized vari-focal | | |
| Lens Mount | M22 | | |
| Mount Type | Board-in | | |
| Focal Length | 2.8 to 12 mm | | |
| Max. Aperture | F1.4 to 2.8 | | |
| Optical Zoom | 4 X | | |
| Field of View | FOV: 38° to 98° Horizontal: 108° to 33° Vertical: 57° to 18° Diagonal: 130° to 38° | | |
| Iris Type | Motorized | | |

| Close Focus Distance | | | 2 m | | |
|-----------------------------|--|---|-------------------|-----------|----------|
| | Lens | Detect | Observe | Recognize | Identify |
| DORI Distance | Wide | 63.2 m | 29.1 m | 16.0 m | 8.0 m |
| | Telephoto | 125.6 m | 57.7 m | 26.3 m | 12.5 m |
| Video | | | | | |
| Video Compression | | | H.265 / H.264 | | |
| Resolution | 5 MP (2592 × 1944) / 4 MP (2560 × 1440) / 2 MP (1920 × 1080) / 1.3 MP (1280 × 960) / 720 P (1280 × 720) | | | | |
| Max Video Frame Rate | Main stream: | 50 Hz (PAL): 25 fps (2592 × 1944, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz (NTSC): 30 fps (2592 × 1944, 2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720) | | | |
| | Sub stream: | ub stream: 50 Hz (PAL): 25 fps (704 × 576, 640 × 480, 640 × 360) 60 Hz (NTSC): 30 fps (704 × 576, 640 × 480, 640 × 360) | | | |
| | Third stream: | | | N/A | |
| Video Stream Capability | | | Dual streams | | |
| Bit Rate Control | | | CBR/VBR | | |
| Video Bit Rate | H.264: 896 Kbps to 8 Mbps H.265: 1024 Kbps to 8 Mbps | | | | |
| Day / Night | Auto (ICR) / Color / B & W | | | | |
| BLC | Support | | | | |
| HLC | Support | | | | |
| WDR | 120 dB True WDR | | | | |
| Scene Self-adaptation | Support | | | | |
| White Balance | Auto, Custom, Locked, Incandescent lamp, Warm light, Natural light, Fluorescent lamp | | | | |
| Gain Control | Low, Mid low, Mid, Mid high, High | | | | |
| Noise Reduction | 2D/3D NR | | | | |
| Motion Detection | Smart / Ordinary (4 areas) | | | | |
| Region of Interest (ROI) | Support (4 areas, Level 1 to 6) | | | | |
| Defog | N/A | | | | |
| Mirror | Support | | | | |
| Image Rotation | 0°/90°/180°/270°/Horizontal/Vertical | | | | |
| Privacy Masking | 4 areas | | | | |
| Corridor Mode | Support | | | | |
| Digital Zoom | Support | | | | |
| Anti-flicker | | | N/A | | |
| Audio | | | | | |
| Built-in MIC | | | Support | | |
| Speaker | | Built-in Speaker (max. 90 dB, 0.5 m) | | | |
| Audio Compression | | | G.711 ulaw | | |
| Environment Noise Filtering | | | Support | | |
| Audio Sampling Rate | 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz | | | | |
| Audio Bit Rate | | 64 | 4 Kbps (G.711 ula | N) | |
| Intelligent Video Analytics | | | | | |
| IVA (Perimeter Protection) | Target Counting, Object Lost/Left, Line Crossing, Area Detection, Smart Motion Detection (human and vehicle targets classification) | | | | |
| Intelligent Search | Support fast retrieval by human and vehicle targets classification | | | | |
| Intelligent Video | Support fast retrieval by human and vehicle targets classification, playback and backup | | | | |
| | | | • | | |

| Face Detection | | | | |
|-----------------------------|--|--|--|--|
| Face Templates | N/A | | | |
| Face Quality Filtering | N/A | | | |
| Face Detected Per Frame | N/A | | | |
| Detection Area | N/A | | | |
| Detected Face Size | N/A | | | |
| Capture Response | N/A | | | |
| Alarm (With Active Deterren | ce Function) | | | |
| Basic Alarm Event | SD card error, Network disconnection, IP conflict, Illegal access, Motion detection, Video tampering, External alarm | | | |
| Smart Alarm Event | Target Counting, Object Lost/Left, Line Crossing, Area Detection, Smart Motion Detection (human and vehicle targets classification) | | | |
| Alarm Linkage Actions | Upload to memory card / FTP, notify surveillance center, trigger recording, trigger capture, send email | | | |
| Network | | | | |
| Simultaneous Live View | Up to 15 channels | | | |
| Network | 1 RJ45 10 M / 100 M self-adaptive Ethernet port | | | |
| SDK and API | Support SDK, API and ONVIF | | | |
| Cyber Security | Video encryption; firmware encryption; configuration encryption; account lockout, security logs; IP filtering; trusted boot; trusted execution; trusted upgrade; password protection; complicated password; basic and digest authentication for HTTP / HTTPS; TLS; IP address filter; Security Audit Log | | | |
| Protocol | TCP / IP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTSP, NTP, UPnP, SMTP, IPv4, UDP, SSL / TLS, PPPoE, SNMP, WebSocket | | | |
| Interoperability | ONVIF Profile S/T/G | | | |
| User / Host | Up to 256 users can be added. 3 user levels: admin, operator and guest | | | |
| Network Storage | FTP, Micro-SD card, auto network replenishment (ANR) | | | |
| Web Browser | IE / Edge / Firefox / Chrome / Safari | | | |
| Management Software | AntarVis 2.0 / ZKBioSecurity IVS / ZKBioAccess IVS / ZKBio CVAccess | | | |
| Mobile Application | AntarView Pro+ (iOS & Android) | | | |
| On-Board Storage | Micro-SD card slot (support max. 256 GB) | | | |
| Operation System | Windows | | | |
| P2P Cloud Service | Support | | | |
| Port | | | | |
| Audio Input | 1 (RCA port) | | | |
| Audio Output | 1 (RCA port) | | | |
| Alarm Input | 2 (5 mA 3 V to 5 VDC each) | | | |
| Alarm Output | 1 (300 mA 12 VDC each) | | | |
| Interface | | | | |
| Reset Button | Support | | | |
| ANR | Support | | | |
| USB | N/A | | | |
| RS485 | Support | | | |
| General | Support | | | |
| Power | | | | |
| Power Supply | PoE (IEEE802.3af, Class 3), DC 12 V ± 10% reverse polarity protection | | | |
| Power Consumption | Basic ≤ 3 W (12 VDC); 4.5 W (PoE) | | | |
| Power Interface | | | | |
| 1 Ower Interface | Ø 5.5 mm coaxial power plug | | | |

| Structure | | | |
|----------------------|--|--|--|
| Casing Material | Aluminium Alloy | | |
| Dimensions | 279.7 × 90.6 × 89.4 (mm) | | |
| Net Weight | 1.4 KG | | |
| Gross Weight | 1.6 KG | | |
| Environment | | | |
| Operating Conditions | -30°C to $+60^{\circ}\text{C}$ (-22°F to $+140^{\circ}\text{F}$) / Humidity 95% or less (non-condensing) | | |
| Storage Conditions | -30°C to $+60^{\circ}\text{C}$ (-22°F to $+140^{\circ}\text{F}$) / Humidity 95% or less (non-condensing) | | |
| Protection Rating | IP67 | | |
| Certifications | | | |
| Certificate | ISO9001, ISO14001, CE, FCC | | |

Ordering Information

| Туре | Model | Descripton |
|----------------|------------------|---|
| 5 MP IP Camera | BL-855P48D-S8-AD | 5 MP Smart Hybrid Light Active Deterrence Motorized Vari-focal Bullet IP Camera |

Dimension (mm)



Accessories

| Optional Bracket | Junction Box | Junction Box with Straight | Junction Box with Bent | Pole Mount | Corner Mount |
|------------------|--------------|-------------------------------|---------------------------|------------|--------------|
| Model | GB01 | GB02 | GB03 | MT03 | MT04 |
| Picture | | | | | |



