

PS-852TC20C-AD | ZKBio Sense PTZ Series

ZKBio Sense 4.5-inch 2 MP 20X Zoom Smart IP PTZ Camera



- 4.5 inches metal and plastic casing
- 1/2.8" 2 MP STARVIS CMOS Sensor
- H.265 triple streams encoding
- High quality 20x zoom integrated lens
- IR array LED, 120 m IR effective range
- Built-in white light LED for full color image
- Red / Blue strobe light for alarm warning
- 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
- Human & Vehicle classification detection and auto tracking
- Remote viewing with mobile application and platform software
- IP66 protection rating for waterproof and dustproof

Product Overview

ZKBio Sense Series IP PTZ Cameras are the front-end cameras of smart video surveillance solutions released by ZKTeco based on the Deep-Learning algorithm and Computer Vision technology.

By using advanced and powerful CPU, coupled with the embedded intelligent classification algorithm, ZKBio Sense Series IP PTZ Cameras can accurately detect and recognize 3 key types of targets: humans, vehicles and objects. Meanwhile, they can effectively filter out other useless objects, such as animals, leaves, shadows, and rain, so as to reduce false alarms. In addition, auto tracking detection is linked with audio alert and white light for active deterrence warning.

ZKBio Sense Series IP PTZ Cameras support pan speed up to 200°/s, and tilt speed up to 180°/s, which can cover large HD video range and provide extremely clear details. They can be widely used in different scenes such as garden, park, smart school, office, industrial park, community, public security, etc.

Core Features

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.

IVA (Intelligent Video Analytics)

ZKBio Sense Series IP PTZ Cameras support multiple intelligent video analytic functions, such as Line Crossing, Target Counting, Object Lost / Left, Area Detection, and Smart Motion Detection, which are based on human and vehicle targets classification. Also, these smart functions can link auto tracking with speaker sound and white light for active deterrence warning.

Auto Tracking

ZKBio Sense Series IP PTZ Cameras can focus on the targets in a detection area and keep tracking for a certain period of time until the targets disappear from the detection area.

True WDR

Powered by ZKTeco's powerful ISP algorithm and high-quality sensor, ZKBio Sense Series IP PTZ Cameras are built-in with true WDR feature, which can present excellent images in extreme contrast lighting environment.

ANR (Only for SD card models)

When the network between ZKBio Sense Series IP PTZ 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, ZKBio Sense Series IP PTZ Cameras can stand against water and dust with industrial IP66 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 | PS-852TC20C-AD |
| Image Sensor | 1/2.8" 2 MP STARVIS CMOS Sensor |
| Max. Resolution | 1920 (H) × 1080 (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 @ F1.6 to F3.5 (AGC on, Color) 0 lux (IR on, B & W) |
| S/N Ratio | > 52 dB |
| IR Range | 120 m |
| White Light Range | 30 m |
| Illuminator On / Off Control | Auto / Manual |
| Illuminator Number | 4 × IR LED, 3 × White Light LED |
| Strobe Light | 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 | M32 | | | | |
| Mount Type | Board-in | | | | |
| Focal Length | 4.7 to 94 mm | | | | |
| Max. Aperture | F1.6 to F3.5 | | | | |
| Optical Zoom | 20X | | | | |
| Field of View | 64° (W) to 3.2° (T) | | | | |
| Iris Type | Fixed | | | | |
| Close Focus Distance | 2 m | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | Wide | 450 m | 205 m | 99 m | 50 m |
| | Telephoto | 1060.0 m | 420.4 m | 210.0 m | 105.8 m |

P / T

| | |
|------------------|---|
| Pan / Tilt Range | Pan: 0° to 360°, Tilt: -10° to 90° |
| Pan Speed | 0.1° to 200°/s |
| Tilt Speed | 0.1° to 180°/s |
| Preset | 225 |
| Preset Speed | 10-Level selection |
| Pattern Group | 4 |
| Auto Mode | Support Idle motion, Power-on auto detection, Rotation speed changes with optical zoom proportionally |
| Protocol | Pelco-D |
| Tour Group | 8 |
| A-B Scan Group | N/A |

Video

| | | |
|--------------------------|--|---|
| Video Compression | H.265 / H.264 | |
| Resolution | 2 MP (1920 × 1080) / 1.3 MP (1280 × 960) / 720 P (1280 × 720) | |
| Max Video Frame Rate | Main Stream | 50 Hz (PAL): 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz (NTSC): 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) |
| | Sub 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 | 50 Hz (PAL): 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576) 60 Hz (NTSC): 30 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576) |
| Video Stream Capability | Triple streams | |
| Bit Rate Control | CBR / VBR | |
| Video Bit Rate | H.264: 896 Kbps to 6 Mbps H.265: 1024 Kbps to 6 Mbps | |
| Day / Night | Auto (ICR) / Color / B & W | |
| BLC | Support | |
| HLC | Support | |
| WDR | 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° / 180° / Horizontal / Vertical | |
| Privacy Masking | 4 areas | |
| Corridor Mode | Support | |
| Digital Zoom | Support | |
| Anti-flicker | Support | |

Audio

| | |
|-----------------------------|---|
| Built-in MIC | Support |
| Built-in LoudSpeaker | Support |
| Audio Compression | G.711u law |
| Environment Noise Filtering | Support |
| Audio Sampling Rate | 8 kHz / 16 kHz / 32 kHz / 44.1 kHz / 48 kHz |

| | |
|------------------------------------|--|
| Audio Bit Rate | 64 Kbps (G.711ulaw) |
| 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 |
| Intelligent Tracking | Support auto tracking by human and vehicle targets classification |
| 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 | |
| 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 |
| Alarm Linkage Actions | Upload to memory card / FTP, notify surveillance center, trigger recording, trigger capture, send email |
| Network | |
| Simultaneous Live View | Up to 10 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 CVSecurity / ZKBio CVAccess |
| Mobile Application | AntarView Pro+ (iOS & Android) |
| On-Board Storage | Micro-SD card slot (support max. 256 GB) |
| Operation System | Windows, MacOS |
| P2P Cloud Service | Support |
| Port | |
| Audio Input | N/A |
| Audio Output | N/A |
| Alarm Input | N/A |
| Alarm Output | N/A |
| Interface | |
| Reset Button | Support |
| ANR | Support |
| USB | N/A |
| RS485 | N/A |

General

Power

| | |
|-------------------|--|
| Power Supply | PoE (IEEE802.3at, 30 W), DC 12 V ± 10% 3 A reverse polarity protection |
| Power Consumption | Basic 22 W (12 VDC); 30 W (PoE) |
| Power Interface | Ø 5.5 mm coaxial power plug |

Structure

| | |
|-----------------|----------------------------|
| Casing Material | Aluminium Alloy + Plastics |
| Dimensions | 280.6 × 128.1 × 207.4 (mm) |
| Net Weight | 2.1 kg |
| Gross Weight | 2.62 kg |

Environment

| | |
|----------------------|--|
| Operating Conditions | -30 °C to +60 °C (-22 °F to +140 °F) / Humidity 95% or less (non-condensing) |
| Storage Conditions | -30 °C to +60 °C (-22 °F to +140 °F) / Humidity 95% or less (non-condensing) |
| Protection Rating | IP66 |

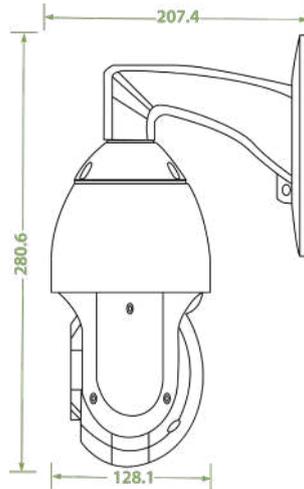
Certifications

| | |
|-------------|----------------------------|
| Certificate | ISO9001, ISO14001, CE, FCC |
|-------------|----------------------------|

Ordering Information

| Type | Model | Description |
|--------------------------|----------------|---|
| 2 MP Smart IP PTZ Camera | PS-852TC20C-AD | ZKBio Sense 2 MP 20X Zoom Smart IP PTZ Camera |

Dimension (mm)



Accessories

| Optional: | Junction Box | Wall Mount Bracket | Celling Mount Bracket | Pole Mount Bracket | Corner Mount Bracket |
|-----------|---|---|---|---|---|
| Model | ZK-B40-7 | ZK-B48-1 | ZK-B48-2 | ZK-B40-4 | ZK-B40-3 |
| Picture |  |  |  |  |  |

