

# PM-855PC33N-AD | ZKBio Sense PTZ Series

## ZKBio Sense 5.5-inch 5 MP 33X Zoom Smart IP PTZ Camera



Object Left /Lost

Auto Tracking

- 5.5 inches metal and plastic casing
- 1/2.7" 5 MP CMOS Sensor
- · H.265 Dual streams encoding
- High quality 33x zoom integrated lens
- IR array LED, 150 m IR effective range
- Built-in white light LED for full color image
- 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**

**Motion Detection** 

ZKBio Sense Series IP PTZ Cameras are the front-end cameras of intelligent 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 scenarios 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  $-30 \,^{\circ}$ C to  $+60 \,^{\circ}$ C, etc.

## **Technical Specification**

Camera					
Model	PM-855PC33N-AD				
Image Sensor	1/2.7" 5 MP CMOS Sensor				
Max. Resolution		2	592 (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			F1.7 to F3.3 (AGC or Lux (IR on, B & W)	n, Color)	
S/N Ratio			> 52 dB		
IR Range			150 m		
White Light Range			30 m		
Illuminator On / Off Control			Auto / Manual		
Illuminator Number		$4 \times IR L$	$ED, 3 \times White Light$	LED	
Strobe Light	N/A				
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	4.5 to 148.5 mm				
Max. Aperture	F1.7 to F3.3				
Optical Zoom	33X				
Field of View	66.1° (W) to 2.46° (T)				
Iris Type	Fixed				
Close Focus Distance	0.7 to 4.5 m				
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	Wide	690 m	455 m	149 m	83 m
	Telephoto	2090.0 m	801.4 m	399.0 m	189.8 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	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 Sub 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) 50 Hz (PAL): 25 fps (704 × 576, 640 × 480, 640 × 360)	
max rideo i rame nate		60 Hz (NTSC): 30 fps (704 × 576, 640 × 480, 640 × 360)	
10 L C	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° / 180° / Horizontal / Vertical		
Privacy Masking	4 areas		
Corridor Mode	Support		
Digital Zoom	Support		
Anti-flicker	N/A		
Audio			
Built-in MIC	N/A		
Built-in Loudspeaker	N/A		
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 Kbps (G.711 ulaw)		

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	1		
Audio Output	1		
Alarm Input	2		
Alarm Output	1		
Interface			
Reset Button	Support		
ANR	Support		
USB	N/A		
RS485	Support		

#### General

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Power Supply	PoE (IEEE802.3at, 30 W), DC 12 V $\pm$ 10% 4 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	376 × 185 × 277 (mm)		
Net Weight	5 kg		
Gross Weight	5.5 kg		

### **Environment**

Operating Conditions	$-30^{\circ}\text{C}$ to $+60^{\circ}\text{C}$ ( $-22^{\circ}\text{F}$ to $+140^{\circ}\text{F}$ ) / Humidity 95% or less (non-condensing)
Storage Conditions	$-30^{\circ}\text{C}$ to $+60^{\circ}\text{C}$ ( $-22^{\circ}\text{F}$ to $+140^{\circ}\text{F}$ ) / Humidity 95% or less (non-condensing)
Protection Rating	IP66

## Certifications

Certificate ISO9001, ISO14001, CE, FCC	
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## **Ordering Information**

Туре	Model	Descripton
5 MP Smart IP PTZ Camera	PM-855PC33N-AD	ZKBio Sense 5 MP 33X Zoom Smart IP PTZ Camera

## Dimension (mm)



## **Accessories**

Optional Bracket	Wall Mount	Ceiling Mount	Pole Mount	Corner Mount
Model	ZK-B64-1	ZK-B64-2	ZK-B64-4	ZK-B64-3
Picture				

