PM-852TC20N-AD | BioSense PTZ Series
BioSense 5.5-inch 2MP 20X Zoom Smart IP PTZ Camera

Human | Vehicle

Target Counting	Line Crossing	Area Detection
Motion Detection	Object Left/Lost	Auto Tracking
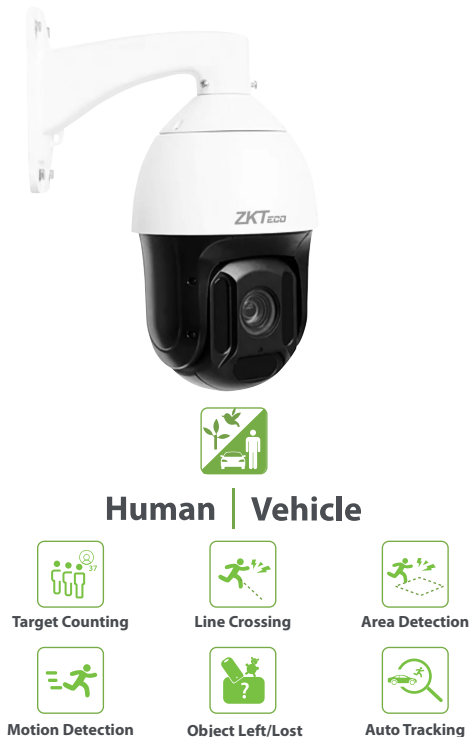
- 5.5-in casing
- 1/2.8" 2MP STARVIS CMOS Sensor
- H.265 triple stream encoding
- High quality 20X zoom integrated lens
- IR array LED,120m IR effective range
- Built-in micro-SD card slot (support max. 256GB)
- Embedded intelligent classification algorithm based on computer vision technology
- Multiple intelligent video analytic features supported
- Human&Vehicle classification detection and auto tracking
- Remote viewing with mobile application and platform software
- IP66 metal casing

Product OverView

BioSense Series IP PTZ are the front-end cameras of intelligent video surveillance solution released by ZKTeco based on the Deep-Learning algorithm and Computer Vision technology.

By using advanced & powerful CPU,couple with the embedded intelligent classification algorithm, the BioSense IP PTZ Cameras can accurately detect and recognize 3 key types of target: human, vehicles and objects, meanwhile effectively filter out the other useless objects such as: animals, leaves, shadows, and rain, etc to reduce the false alarms, and auto tracking detection to linkage with speaker sound and strobe light for active deterrence warning.

The BioSense IP PTZ Cameras can support pan speed up to 200°/s, and tilt speed up to 180°/s, whch can cover large HD video range and provide extremely clear details. It can be widely deployed in different scenario 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)

The BioSense IP PTZ Cameras support multiple intelligent video analytic functions: Target Counting, Object Lost/Left, and the Line Crossing, Area detection, Smart Motion Detection supports human and vehicle targets classification and auto tracking to linkage with speaker sound and strobe light for active detterrence warning.

Auto Tracking

The BioSense 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 disappeard in the detection area.

True WDR

Powered by ZKTeco's powerful ISP algorithm and high quality sensor, the BioSense IP PTZ Cameras are built-in with true wide dynamic range feature, can present excellent picture images at extreme contrast lighting environment.

ANR (Only for SD card models)

While the connection lost between IPC and NVR, the video will be saved in SD card. The saved video will be auto replenished to NVR when network recovers to avoid any video lost.

Protection

With precise mechanical and rugged metal casing design, the BioSense Series IP Camers can stand against water and dust with industrial IP66 rank, and support to work at variety of harsh outdoor environments such as temperature range -30℃ to +60 ℃,etc.

Technical Specification

Camera

Model	PM-852TC20N-AD
Image Sensor	1/2.8" 2MP STARVIS CMOS Sensor
Max.Resolution	1920 (H)*1080 (V)
ROM	128MB
RAM	256MB
Scanning System	Progressive Scan
Electronic Shutter Speed	1/5s to 1/100,000s
Min. Illumination	0.001Lux@F1.6 ~ F3.5 (AGC on, Color) 0 lux (IR on, B&W)
S/N Ratio	>52dB
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	N/A
Smart IR	Support
Angle Adjustment for Installation	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–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 ~ 94mm			
Max. Aperture	F1.6 ~ F3.5			
Optical Zoom	20X			
Field of View	64°(W) ~ 3.2°(T)			
Iris Type	Fixed			
Close Focus Distance	2 m			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Wide	450m	205m	99m	50m
	Telephoto	1060.0 m	420.4 m	210.0m	105.8 m

P/T

Pan/Tilt Range	Pan: 0° ~ 360°, Tilt: -10° ~ 90°

Pan Speed	0.1° ~ 200°/s
Tilt Speed	0.1° ~ 180°/s
Preset	255
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		2MP (1920*1080) / 1.3MP (1280*960) / 720P (1280*720)
Max Video Frame Rate	Main stream:	50Hz (PAL): 25fps (1920*1080, 1280*960, 1280*720) 60Hz (NTSC): 30fps (1920*1080, 1280*960, 1280*720)
	Sub stream:	50Hz (PAL): 25fps (704*576, 640*480, 640*360) 60Hz (NTSC): 30fps (704*576, 640*480, 640*360)
	Third stream:	50Hz (PAL): 25fps (1920*1080, 1280*960, 1280*720, 704*576) 60Hz (NTSC): 30fps (1920*1080, 1280*960, 1280*720, 704*576)
Video Stream Capability		Triple streams
Bit Rate Control		CBR / VBR
Video Bit Rate		H.264: 896kbps–6Mbps H.265: 1024Kbps ~ 6Mbps
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 1~6)
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	N/A
Built-in LoudSpeaker	N/A
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 Count, Object Lost / Left Line Crossing, Area detection, Smart Motion Detection (human and vehicle targets classification)
Intelligent Search	Support fast retrieval by human & vehicle targets classification
Intelligent Video	Support fast retrieval by human & vehicle targets classification, playback and backup
Intelligent Tracking	Support auto tracking by human & 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 Count, 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 ockout; 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. 256GB)
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	N/A

General

Power

Power Supply	PoE (IEEE802.3at,30W), DC 12V±10% 4A reverse polarity protection
Power Consumption	Basic 22W (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	5kg
Gross Weight	5.5kg

Environment

Operating Conditions	−30 ℃ to +60 ℃ (−22 ℉ to +140 ℉)/ Humidity 95% or less (non-condensing)
Storage Conditions	−30 ℃ to +60 ℃ (−22 ℉ to +140 ℉) /Humidity 95% or less (non-condensing)
Protection Grade	IP66

Certifications

Certificate	ISO9001, ISO14001, CE, FCC

Ordering Information

Type	Model	Descripton
2MP Smart IP PTZ Camera	PM-852TC20N-AD	BioSense 2MP 20X Zoom Smart IP PTZ Camera

Dimension (mm)
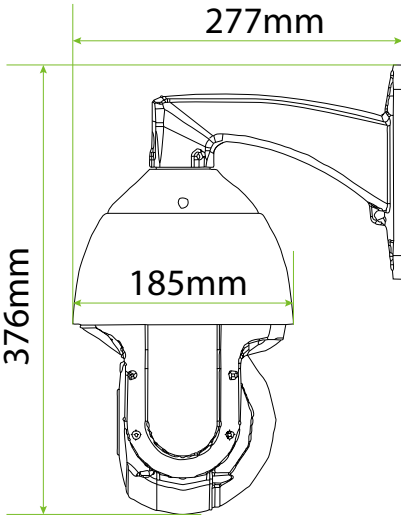
Accessories

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