

# DL-855P28B-S8-S BioSense Series

## 5MP BioSense Motorized Lens Dome IP Camera

















• 1/2.7" 5MP CMOS Sensor

- · H.265 Dual stream encoding
- High-quality optical lens: 3.6-10.8mm
- 30m IR effective range
- Built-in PoE
- Built-in micro-SD card slot (support max. 256GB)
- Embedded intelligent classification algorithm based on computer vision technology
- Multiple intelligent video analytic features
- Support multiple browsers web client
- Remote viewing with mobile application and platform software
- · Lightning protection up to 6K V
- IP67 metal casing & IK10

#### **Product Overview**

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

By using advanced and powerful CPU, couple with the embedded intelligent classification algorithm based on computer vision technology, the BioSense IP 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 more focusing on the important alarms.

The BioSense IP Camera can greatly help to improve the efficiency and safety of the entire video surveillance system, can be widely used in different scenario such as 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 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.

#### True WDR

Powered by ZKTeco's powerful ISP algorithm and high quality sensor, the BioSense Series IP 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 Cameras can stand against water and dust with industrial IP67 rank, and support to work at variety of harsh outdoor environments such as temperature range  $-30^{\circ}$ C to  $+60^{\circ}$ C,etc.

# **Technical Specification**

Camera       Model     DL-855P28B-S8-S       Image Sensor     1/2.7" 5MP CMOS       Max.Resolution     2592(H)*1944(V)       ROM     128MB       RAM     256MB       Scanning System     Progressive Scan       Electronic Shutter Speed     1/5 s to1/100,000 s       Min. Illumination     0.001Lux@F1.7~3.3 (AGC on, Color)       5/N Ratio     >52dB       IR Range     30 m       Illuminator On/Off Control     Auto/Manual       Illuminator Number     4*IR LED       Smart IR     Support       Angle Adjustment for Installation     Pan: 0°-360°       TV System     PAL/NTSC       Image Settings     Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammande, adjustable by platform software or web browser       Software Reset Default     Support				
Image Sensor1/2.7"5MP CMOSMax.Resolution2592(H)*1944(V)ROM128MBRAM256MBScanning SystemProgressive ScanElectronic Shutter Speed1/5 s to1/100,000 sMin. Illumination0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)S/N Ratio>52dBIR Range30 mIlluminator On/Off ControlAuto/ManualIlluminator Number4*IR LEDSmart IRSupportAngle Adjustment for InstallationPan: 0"-360" Tilt: 0"-90" Rotation: 0"-360"TV SystemPAL/NTSCImage SettingsTrigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
Max.Resolution     2592(H)*1944(V)       ROM     128MB       RAM     256MB       Scanning System     Progressive Scan       Electronic Shutter Speed     1/5 s to1/100,000 s       Min. Illumination     0.001Lux@F1.7~3.3 (AGC on, Color) Olux (IR on, B&W)       S/N Ratio     >52dB       IR Range     30 m       Illuminator On/Off Control     Auto/Manual       Illuminator Number     4*IR LED       Smart IR     Support       Angle Adjustment for Installation     Tilt: 0*–90° Rotation: 0*–360°       TV System     PAL/NTSC       Image Settings     Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
ROM RAM 256MB Scanning System Progressive Scan  Electronic Shutter Speed 1/5 s to1/100,000 s Min. Illumination 0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)  S/N Ratio >52dB IR Range 10lluminator On/Off Control Auto/Manual Illuminator Number 4*IR LED Smart IR Support Angle Adjustment for Installation Tilt: 0°-90° Rotation: 0°-360° TV System PAL/NTSC Image Settings Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Game mode, adjustable by platform software or web browser				
RAM Scanning System Progressive Scan  Electronic Shutter Speed 1/5 s to1/100,000 s  Min. Illumination 0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)  S/N Ratio >52dB  IR Range 30 m  Illuminator On/Off Control Auto/Manual  Illuminator Number 4*IR LED  Smart IR Support  Angle Adjustment for Installation Tilt: 0°–90° Rotation: 0°–360° TV System PAL/NTSC  Image Settings Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
Scanning System  Electronic Shutter Speed  1/5 s to1/100,000 s  Min. Illumination  0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)  S/N Ratio  >52dB  IR Range  IR Range  30 m  Illuminator On/Off Control  Auto/Manual  Illuminator Number  5 support  Angle Adjustment for Installation  Tilt: 0°-90° Rotation: 0°-360°  TV System  FAL/NTSC  Image Settings  Progressive Scan  1/5 s to1/100,000 s  0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)  S52dB  R Wange Naw, On the Settings  Paus On Settings  Paus On Settings  Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gamer mode, adjustable by platform software or web browser				
Electronic Shutter Speed  1/5 s to1/100,000 s  Min. Illumination  0.001Lux@F1.7~3.3 (AGC on, Color) 0 lux (IR on, B&W)  S/N Ratio  >52dB  IR Range  30 m  Illuminator On/Off Control  Auto/Manual  Illuminator Number  4*IR LED  Smart IR  Support  Angle Adjustment for Installation  Tilt: 0°-90° Rotation: 0°-360° TV System  PAL/NTSC  Image Settings  Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
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IR Range  Illuminator On/Off Control  Auto/Manual  Illuminator Number  Smart IR  Support  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, Game mode, adjustable by platform software or web browser				
Illuminator On/Off Control  Illuminator Number  Auto/Manual  4*IR LED  Smart IR  Support  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, Game mode, adjustable by platform software or web browser				
Illuminator Number     4*IR LED       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, Gammande, adjustable by platform software or web browser				
Smart IR  Pan: 0°-360° Angle Adjustment for Installation  Tilt: 0°-90° Rotation: 0°-360°  TV System  PAL/NTSC  Image Settings  Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Game mode, adjustable by platform software or web browser				
Angle Adjustment for Installation  Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°  TV System  PAL/NTSC  Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammade, adjustable by platform software or web browser				
Angle Adjustment for Installation  Tilt: 0°–90° Rotation: 0°–360°  TV System  PAL/NTSC  Image Settings  Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
TV System PAL/NTSC Image Settings Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gammode, adjustable by platform software or web browser				
mode, adjustable by platform software or web browser				
	Trigger mode, Brightness, Contrast, Saturation, Hue, Sharpness, AGC, White balance, Gamma, Backlight mode, adjustable by platform software or web browser			
<b>General Function</b> Heartbeat, Mirror, Privacy mask, Log, Password reset	Heartbeat, Mirror, Privacy mask, Log, Password reset			
Lens				
Lens Type Motorized vari-focal	Motorized vari-focal			
Lens Mount M22	M22			
Mount Type Board-in	Board-in			
Focal Length 3.6~10.8mm	3.6~10.8mm			
Max. Aperture F1.7~3.3	F1.7~3.3			
Optical Zoom 3X	3X			
FOV: 32°~98°  Horizontal: 108°–33°  Vertical: 57° –18°  Diagonal: 130° –38°	Vertical: 57° –18°			
Iris Type Fixed				
Close Focus Distance 2 m				
Lens Detect Observe Recognize	Identify			
DORI Distance         Wide         28.8 m         19.6 m         11.0 m	6.0 m			
Telephoto 100.4 m 40.6 m 20.7 m	9.2 m			
Video				
Video Compression H.265 / H.264	H.265 / H.264			
Resolution 5MP(2592*1944) / 4MP(2560*1440) / 3MP(2304*1296) / 1080P (1920*1080) / 1.3MP (1280*720) / D1 (704*576) / VGA (640*480) / Q720 (640*360)	5MP(2592*1944) / 4MP(2560*1440) / 3MP(2304*1296) / 1080P (1920*1080) / 1.3MP (1280*960) / 720P (1280*720) / D1 (704*576) / VGA (640*480) / Q720 (640*360)			

	Main stream:	50Hz (PAL): 25fps (2592*1944,1920*1080, 1280*960, 1280*720) 60Hz (NTSC): 30fps (2592*1944,1920*1080, 1280*960, 1280*720)	
Max Video Frame Rate	Sub stream: 50Hz (PAL): 25fps (704*576, 640*480, 640*360) 60Hz (NTSC): 30fps (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: 192kbps-8Mbps H.265: 224Kbps ~ 8Mbps		
Day/Night	Auto (ICR) / Color / B&W		
BLC	Support		
HLC		Support	
WDR	True WDR		
Scene Self-adaptation	Support		
White Balance	Auto, Custom, Lock	ed, 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°/90°/180°/270°/Horizontal/Vertical	
Privacy Masking		4 areas	
Corridor Mode	Support		
Digital Zoom	Support		
Anti-flicker	N/A		
Audio			
Built-in MIC		N/A	
Audio Compression	G.711ulaw		
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)	Line Crossing, Area detec	Target Count, Object Lost/Left, ction, Smart Motion Detection (human and vehicle targets classification)	
Intelligent Search	Embedded intellige	ent classification algorithm based on computer vision technology	
Intelligent Video	Support fast retrieval by human & 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		

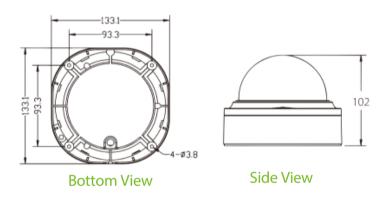
Alarm			
Basic Alarm Event	Network disconnection, IP conflict, Illegal access, Motion		
basic Alaitti Event	detection, Video tampering, External alarm		
Smart Alarm Event	Target Count, Object Lost/Left, Line Crossing, Area detection, Smart Motion Detection (human and vehicle targets classification		
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 CVSecurity/ZKBio CVAccess		
Mobile Application	AntarView Pro+ (iOS & Android)		
On-Board Storage	Micro-SD Card Slot (support max. 256GB)		
Operation System	Windows		
P2P Cloud Service	Support		
Port			
Audio Input	1 (RCA port)		
Audio Output	1 (RCA port)		
Alarm Input	2 (5 mA 3V-5 VDC each)		
Alarm Output	1 (300 mA 12 VDC each)		
Interface			
Reset Button	Support		
ANR	Support		
USB	N/A		
RS485	Support		
General			
Power			
Power Supply	PoE (IEEE802.3af,Class 3), DC 12V±10% reverse polarity protection		
Power Consumption	Basic ≤ 3W (12 VDC); 4.5 W (PoE)		
Power Interface	Ø 5.5 mm coaxial power plug		
Structure			
Casing Material	Aluminium Alloy		
Dimensions	Ф102 * 93.3(mm)		
Net Weight	0.50kg		
Gross Weight	0.70kg		

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 Grade	IP67,IK10		
Certifications			
Certificates	ISO9001;ISO14001;CE; FCC		

# **Ordering Information**

Туре	Model	Descripton	
5MP IP Camera	DL-855P28B-S8-S	5MP BioSense Motorized Lens Dome IP Camera	

# **Dimension (mm)**



## **Accessories**

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





