# ZKTeco

# BS-855P11T-S8-C-MI-S | BioSense Full Color Series
## 5MP BioSense Full Color Fixed Lens Bullet IP Camera

- 1/2.7" 5MP CMOS Sensor
- H.265 Dual stream encoding
- High-quality optical lens: 2.8mm
- White light range 20m
- Built-in PoE & Microphone
- Built-in micro-SD card slot (support max. 256GB)
- Embedded intelligent classification algorithm based on computer vision
- Multiple intelligent video analytic features
- Support multiple browsers web client
- Remote viewing with mobile application and platform software
- Lightning protection up to 6KV
- IP67 metal casing

| Target Counting | Line Crossing | Intrusion Detection | Motion Detection | Object Left/ Remove | IP67 Metal Casing |

## 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.

### Full-color & Starlight

It adopts an F1.0 large aperture lens and a 1/2.7" high-performance sensor. With a higher amount of absorbed light and an advanced image processing algorithm, the camera presents an impressive low light performance with an exceptional balance between noise reduction and the blur of moving objects. With 4pcs warm white LED illuminators, it can provide a colorful and vivid image even in total darkness.

### 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 tempera-ture range -30℃ to +60 ℃,etc.

# Technical Specification

## Camera

| | |
|---|---|
| Model | BS-855P11T-S8-C-MI-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 | 0.0001Lux@F1.0 (AGC on, Color) |
| S/N Ratio | >52dB |
| White light Range | 20 m |
| Illuminator On/Off Control | Auto/Manual |
| Illuminator Number | 4*White Light LED |
| Smart IR | N/A |
| Angle Adjustment for Installation | Pan: 0°–360°<br>Tilt: 0°–90°<br>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 | Fixed Lens |
| Lens Mount | M12 |
| Mount Type | Board-in |
| Focal Length | 2.8mm |
| Max. Aperture | F1.0 |
| Optical Zoom | N/A |
| Field of View | FOV: 110°<br>Horizontal: 88°<br>Vertical: 45°<br>Diagonal: 105° |
| Iris Type | Fixed |
| Close Focus Distance | 1.5 m |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | 2.8mm | 43 m | 16 m | 9 m | 4 m |

## Video

| | | |
|---|---|---|
| Video Compression | | H.265 / H.264 |
| Resolution | | 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) |
| Max Video Frame Rate | Main stream: | 50Hz (PAL): 25fps (2592*1944,1920*1080, 1280*960, 1280*720) 60Hz (NTSC): 30fps (2592*1944,1920*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: | 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, 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°/90°/180°/270°/Horizontal/Vertical |
| Privacy Masking | | 4 areas |
| Corridor Mode | | Support |
| Digital Zoom | | Support |
| Anti-flicker | | N/A |

## Audio

| | |
|---|---|
| Built-in MIC | Support |
| 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) | Target Count, Object Lost/Left, Line Crossing, Area detection, Smart Motion Detection (human and vehicle targets classification) |
| Intelligent Search | Embedded intelligent 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 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 |
| 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 | 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 (IEEE802.3af,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 | 180.80 * 75.30 * 66.20 (mm) |
| Net Weight | 0.40kg |
| Gross Weight | 0.52kg |

| 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 |
| Certifications | |
| Certificates | ISO9001;ISO14001;CE;FCC |

## Ordering Information

| Type | Model | Descripton |
|---|---|---|
| 5MP IP Camera | BS-855P11T-S8-C-MI-S | 5MP BioSense Fixed Lens Bullet IP Camera |

## Dimension (mm)
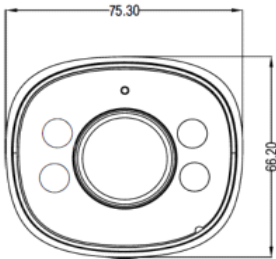


Side View
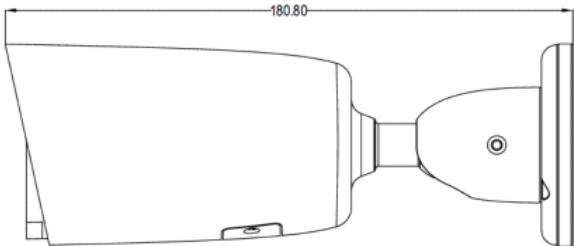


Bottom View

## 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 |  |  |  |  |  |