

EL-855D48I-S7-S | ZKBio Sense Entry Series

5 MP Motorized Varifocal Eyeball IP Camera



**Line
Crossing**



**Area
Detection**



**Motion
Detection**



**IP67 Metal
Casing**

- 1/2.7" 5 MP CMOS Sensor
- H.265 dual stream encoding
- High-quality optical lens: 2.8 - 12 mm
- 120 dB, True WDR
- 80 m IR effective range
- Built-in PoE
- Embedded intelligent classification algorithm based on computer vision technology
- Multiple intelligent video analytic features supported
- Support multiple browsers web client
- Remote viewing with mobile application compatible with ZKBio CVSecurity
- Lightning protection up to 6 kV
- Metal casing design and reached IP67 protection rating standard for waterproof and dust proof

Product Overview

ZKBio Sense Entry Series IP cameras are the entry level front-end cameras which are especially focusing on the channel market.

As part of the ZKBio Sense Series, the ZKBio Sense Entry Series IP Cameras are also intelligent video surveillance solution based on ZKTeco Deep-Learning algorithm and Computer Vision technology.

By using advanced & powerful CPU, couple with the embedded intelligent classification algorithm, the ZKBio Sense Entry IP Cameras can accurately detect and recognize the key type of target: human, meanwhile effectively filter out the other useless objects such as: animals, leaves, shadows, and rain, etc to reduce the false alarms.

The ZKBio Sense Entry IP Camera are the cost-effective intelligent video solution with good balance between economy and efficiency and safety for 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 ZKBio Sense Entry IP Cameras support multiple intelligent video analytic functions: Line Crossing, Area detection, Smart Motion Detection triggered by human target classification.

True WDR

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

Protection

With precise mechanical and rugged metal casing design, the ZKBio Sense Entry Series IP Cameras **reached IP67 protection rating for waterproof and dustproof**, and support to work at variety of harsh outdoor environments such as a wide temperature range from -30°C to +60 °C, etc.

Technical Specification

Camera

Model	EL-855D48I-S7-S
Image Sensor	1/2.7" 5 MP CMOS Sensor
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive Scan
Electronic Shutter Speed	1/5 s to 1/100,000 s
Min. Illumination	0.01Lux @ F1.4 - 2.8 (AGC on, Color) 0 lux (IR on, B & W)
S/N Ratio	≥ 50 dB
IR Range	80 m
Illuminator On / Off Control	Auto / Manual
Illuminator Number	4* IR 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 Varifocal
Lens Mount	M22
Mount Type	Board-in
Focal Length	2.8 - 12 mm
Max. Aperture	F1.4 - 2.8
Optical Zoom	4X
Field of View	FOV: 38° - 98° Horizontal: 108° - 33° Vertical: 57° - 18° Diagonal: 130° - 38°
Iris Control Type	Fixed
Close Focus Distance	2 m

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	Wide	45.8 m	19.6 m	11.0 m	6.0 m
	Telephoto	125.6 m	57.7 m	26.3 m	12.5 m

Video

Video Compression	H.265 / H.264	
Resolution	5 MP (2592 × 1944) / 4 MP (2560 × 1440) / 3 MP (2304 × 1296) / 1080P (1920 × 1080) / D1 (704 × 576) / VGA (640 × 480) / Q720 (640 ×360)	
Max. Video Frame Rate	Main stream:	50Hz (PAL): 25fps (2592 × 1944, 2560 × 1440, 2304 × 1296, 1920 × 1080) 60Hz (NTSC): 30fps (2592 × 1944, 2560 × 1440, 2304 × 1296, 1920 × 1080)
	Sub stream:	50Hz (PAL): 25 fps (704 × 576, 640 × 480, 640 × 360) 60Hz (NTSC): 30 fps (704 × 576, 640 × 480, 640 × 360)
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	TWDR	
Scene Self-adaptation	Support	
White Balance	Auto, Custom, Locked, Incandescent lamp, Warm light, Natural light, Fluorescent lamp adaptive	
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° / 90° / 180° / 270° / Horizontal / Vertical	
Privacy Masking	4 areas	
Corridor Mode	Support	
Digital Zoom	Support	
Anti-flicker	Support	

Audio

Built-in MIC	N/A
Speaker	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)	Line Crossing, Area detection, Smart Motion Detection (triggered by human target classification)
Intelligent Search	Support fast retrieval by human target classification

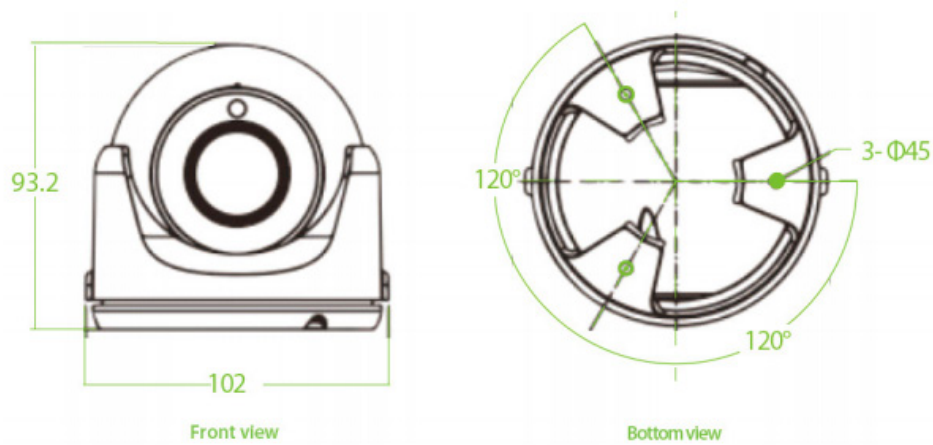
Intelligent Video	Support fast retrieval by human target classification, playback and backup
Face Detection	
Face Templates	N/A
Face Quality Filtering	N/A
Face Detected Per Frame	N/A
Detection Area	N/A
Detected Face Size	N/A
Capture Response	N/A
Alarm	
Basic Alarm Event	Network disconnection, IP conflict, Illegal access, Motion detection, Video tampering, External alarm
Smart Alarm Event	Line Crossing, Area detection, Smart Motion Detection (triggered by human target classification)
Alarm Linkage Actions	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
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 CVAcess
Mobile Application	AntarView Pro+ (iOS & Android)
On-Board Storage	N/A
Operation System	Windows
P2P Cloud Service	Support
Port	
Audio Input	1 (RCA port)
Audio Output	1 (RCA port)
Alarm Input	N/A
Alarm Output	N/A
Interface	
Reset Button	N/A
ANR	N/A
USB	N/A
RS485	N/A
General	
Power	
Power Supply	PoE (IEEE802.3af, Class 3), DC 12 V±10% reverse polarity protection
Power Consumption	Basic ≤ 3 W (12 VDC); 4.5 W (PoE)

Power Interface	Ø 5.5 mm coaxial power plug
Structure	
Casing Material	Aluminium Alloy
Dimensions	102 × 93.2 (mm)
Gross Weight	0.55 KG
Net Weight	0.69 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)
Ingress Protection Rating	IP67
Certifications	
Certificate	ISO9001, ISO14001, CE, FCC

Ordering Information

Type	Model	Descripton
5 MP IP Camera	EL-855D48I-S7-S	5 MP Motorized Varifocal Smart Eyeball 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					