

LSE8MPS3-IP-2.8-IR30

8MP IR Fixed-focal Eyeball Network Camera



WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

WizSense 3 Series Network Camera greatly saves on bandwidth and storage space through its AI Coding technology. Driven by its advanced deep learning algorithms, the camera supports intelligent functions such as perimeter protection, smart motion detection (SMD), Quick Pick, and AI SSA (AI Scene Self-adaptation), making it easy and convenient to use. Starlight technology and its large aperture lens also allow the camera to produce clear, vivid images even in poor lighting conditions.

Functions

SMD 4.0

Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

AI SSA

Al Scene Self-adaptation (Al SSA) adopts deep learning algorithms to detect environmental conditions, such as rain, fog, backlight, low light and flicker, to adjust the parameters of the image to suit the conditions, ensuring that clear images are always produced.

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

- 8-MP 1/2.8" CMOS image sensor, excellent low luminance performance and high definition of images.
- Outputs max. 8MP (3840 × 2160) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- · Built-in IR LED, max. IR distance: 30 m.
- ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Max. 256 G Micro SD card. built-in Mic.
- 12 VDC/PoE power supply facilitates installation.
- IP67 protection.
- SMD 4.0, AI SSA.

Perimeter Protection

With deep learning algorithm, Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion) are largely reduced.

Protection (IP67, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Cyber Security

Network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from comprising the device.

Carmera	Technical Specification					Main stream: 3840 × 2160 @ (1–25/30) fps Sub stream 1: 704 × 576 @ (1–25 fps)/704 × 480 @			
Make Resolution								Video Frame Rate	(1–30 fps) Sub stream 2: 1920×1080 @ (1–25/30 fps) *The values above are the max. frame rates of each
Max. Resolution	Image Sensor		1/2.8" CMOS						
## Resolution 1.03	Max. Resolution		3840 (H) × 2160 (V)					6. 6 135	
AMA	ROM		128 MB					Stream Capability	
Resolution	RAM		1 GB						1728/2592 × 1944); 4M (2688 × 1520); 3.6M (2560 ×
Min. Illumination	Scanning Sys	Scanning System		Progressive				Resolution	(1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240); VGA
Min. Illumination	Electronic Sh	nutter Speed	Auto/Manual 1/3 s-1/100,000 s					Pit Pata Control	
Day/Night	Min. Illumina	Min. Illumination		0.0007 lux@F1.4 (B/W, 30 IRE)					H.264: 3 kbps–8192 kbps
Illuminator On/Off Control Illuminator On/Off Control Illuminator On/Off Control Illuminator Number 2 (IR LED)	S/N Ratio							Day/Night	
HLC Yes	Illumination	Distance	30 m (98.43 ft)						
More	Illuminator C	On/Off Control	Auto/Manual						
Pan: 0"-360", Till: 0"-78", Rotation: 0"-360" Scene Self-adaptation (SSA) Ves	Illuminator N	Number	2 (IR LED)						
Lens Fixed-focal White Balance	Pan/Tilt/Rota	ation Range							
Lens Mount								Yes	
Focal Length 2.8 mm; 3.6 mm Motion Detection 3.6 mm; Horizontal:84*; vertical: 47*; diagonal: 127* 3.6 mm; Horizontal:84*; vertical: 47*; diagonal: 127* 3.6 mm; Horizontal:84*; vertical: 47*; diagonal: 127* 3.6 mm; 2 m (6.6 ft) Lens Detect 2.8 mm; 1.5 m (4.9 ft) 3.6 mm; 2 m (6.6 ft) DORI DISTANCE 2.8 mm (28.7 m) (28.7 ft) (11.5 ft) (15.7 4t ft) (28.87 ft) (13.3.6 ft) (33.4 9 ft)			Fixed-focal					White Balance	
Max. Aperture F1.4 Field of View 2.8 mm; Horizontal; 107°, vertical; 56°, diagonal; 127° Fixed Lens Detect 2.8 mm; 1.5 m (4.9 ft) 3.6 mm; 2 m (6.6 ft) DORI Distance 2.8 mm; 2 m (6.6 ft) Lens Detect (192.77 at) (115.16 ft) (57.41 ft) (28.87 ft) G34.97 ft) (113.36 ft) (66.93 ft) (33.46 ft) Intelligence IVS (Perimeter Protection) Tripwire, intrusion (support the classification and accurate detection of vehicle and human) ALSSA Yes Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Smart Search Wideo Compression H265; H264; H264H; H264B; MJPEG (only supported by the sub stream) AI Coding AI Coding AI Coding AI Coding AI Coding AI LCoding AI Lens AI Lens Detect Defeg Yes AFSA Ves AFSA Ves Image Rotation O'/907/1807/270' (support 90'/270' with 2688×1520 resolution and lower) Wideo Compression Also Ves Audio Audio Audio Audio Audio Audio Compression Alarm No SD card; SD card full; SD card error, network disconnection; iP conflict; illegal access; motion detection, violage detection; SMD; safety exception Network Network Network Port Al H.265 Network Protocol SMTP; FTP; STTP; DHCP; DNS; DDNS; QoS; UPPP; NTP; PNCP; DNS; DDNS; QoS; UPPP; NTP; PNCP; DNS; DDNS; QoS; UPPP; NTP; PNCP; STTP; DHCP; DNS	Lens Mount		M12					Gain Control	Auto
Field of View 2.8 mm: Horizontal:307; vertical: 56°; diagonal: 97° Iris Control Fixed Close Focus Distance 2.8 mm: 1.5 m (4.9 ft) 3.6 mm: 2 m (6.6 ft) Defog Fixed AFSA Yes AFSA Yes AFSA Yes AFSA Yes AFSA Yes Image Rotation O'/907/1807/270° (support 90°/270° with 2688×1520 resolution and lower) Mirror Yes Privacy Masking 4 areas Audio Intelligence IVS (Perimeter Protection) AI SSA Yes Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events: wideos Video Video Compression Video Compression H.265; H.264; H.264B; MJPEG (only supported by the sub stream) AI Corline AI H.265 AI H.265 AI H.265 AI H.2664 AI H.265 Network Protocol Video Compression AI H.265 AI H.265 AI H.2664 AI H.265 Network Protocol Smart H.264+ Network Protocol Network Protocol Network Protocol Smart P.5EH; DHCP; DNS; DDNS; CoS; UPPP, NITP; Network Protocol Network Protocol Smart P.5EH; DHCP; DNS; DDNS; CoS; UPPP, NITP; Network Protocol Network Protocol Smart P.5EH; DHCP; DNS; DDNS; CoS; UPPP, NITP; Network Protocol Network Protocol	Focal Length		2.8 mm; 3.6 mm					Noise Reduction	3D NR
Iris Control Fixed Close Focus Distance 2.8 mm: 1.5 m (4.9 ft) 3.6 mm: 2m (6.6 ft) DORI Distance 2.8 mm 8.7 m 2.8 mm 8.7 m 3.5.1 m 17.5 m 8.8 m 102.1 m 3.6 mm 102.1 m 40.8 m 20.4 m 10.2 m (33.4 ft) Built-in MIC Yes Audio Audio Audio Fripwire, intrusion (support the classification and accurate detection of vehicle and human) Al SSA Yes Audio Al SSA Yes Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access, motion detection; intelligent search, event extraction and merging to event intelligent search, event extraction and merging to event videos Video Video Compression H.265; H.264; H.264H; H.264B; MIPEG (only supported by the sub stream) Smart L265+ Smart L265+ Smart L265+ Smart L265+ Al Coding Al H.265 Al Coding Al H.265 ArSA Yes AFSA Yes Mirror Yes Audio Audio Suiti-in MIC Yes Alarm Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access, motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exception Network Network Port SDK and API Yes All Coding All Coding All Coding All H.265	Max. Aperture		F1.4					Motion Detection	OFF/ON (4 areas, rectangular)
Defage Ves	Field of View	,	The state of the s					Region of Interest (RoI)	Yes (4 areas)
Close Focus Distance 2.8 mm: 1.5 m (4.9 ft) 3.6 mm: 2 m (6.6 ft) Lens	Iris Control							Defog	Yes
Lens Detect Observe Recognize Identify DORI Distance 2.8 mm 87.7 m (287.73 ft) (115.16 ft) (28.87 ft) (28.87 ft) (28.87 ft) (33.46 ft) 3.6 mm (334.97 ft) (133.86 ft) (66.93 ft) (33.46 ft) Intelligence IVS (Perimeter Protection) Tripwire, intrusion (support the classification and accurate detection of vehicle and human) AI SSA Yes Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events wideos Video Video Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) Video All Coding All Coding All Coding Lens Detect Observe Recognize Identify Recognize Identify Mirror Yes Audio Audio Privacy Masking 4 areas Audio Audio Audio No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video ampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exception Network Network Network Port RJ-45 (10/100 Base-T) SDK and API Yes Image Rotation "Py97/1807/270" with 2688×15.20 resolution and lower) Network 14 areas Audio Audio No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video ampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exception Network Network Port RJ-45 (10/100 Base-T) SDK and API Yes All Coding All L.265 Network Protocol SMTP; FTP; STTP; DHCP; DNP; APP; RTSP; RTCP; RTMP; SMTP; FTP; STTP; DHCP; DNP; DNP; NTP;	Close Feetis	Distance						AFSA	Yes
DORI Distance 2.8 mm 3.6 mm 3.8 m (133.86 ft) 3.8 m (66.93 ft) 3.8 m (33.46 ft) 4 udio 5 unit in MIC 4 udio Compression 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 5 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 6 unit in MIC 4 udio Compression 4 udio Compression 5 unit in MIC 4 udio Compression 6 unit in MIC 8 udio Compression 9 unit in MIC 4 udio Compression 9 unit in MIC 4 udio Compression 9 unit in MIC 4 udio	close i ocus		3.6 mm: 2 m (6.6 ft)				Image Rotation		
Distance 2.8 mm (287.73 ft) (115.16 ft) (57.41 ft) (28.87 ft) Privacy Masking 4 areas	DOPI							Mirror	Yes
Intelligence IVS (Perimeter Protection) Al SSA Ves Quick Pick Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Video Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) Al Coding Al Goling Al H.265 Audio Compression Built-in MIC Yes Audio Compression G.711a; G.711Mu; PCM; G.726; G.723 Alarm Audio Compression G.711a; G.711Mu; PCM; G.726; G.723 Alarm Alarm Alarm No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exception Network Network Network Port Al Goling Al H.265 Network Protocol Network Protocol Network Protocol Network Protocol Network Protocol		2.8 mm						Privacy Masking	4 areas
IVS (Perimeter Protection) Al SSA Yes Quick Pick With Al NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Smart Search Video Video Video Compression H.265; H.264; H.264H; H.264B; MIPEG (only supported by the sub stream) Smart Codec Smart L.265+ Smart H.265+ Smart H.265+ Smart H.265 Al Goding Audio Compression Audio Compression Alarm Alarm Alarm Alarm Event		3.6 mm						Audio	
Alarm Al	Intelligen	ce						Built-in MIC	Yes
Quick Pick With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Video Network Video Compression H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream) Smart Codec Smart H.265+ Smart H.265+ AI Footing AI H.265 Network Protocol	IVS (Perimet	er Protection)						Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Quick Pickthat users are interested in from SMD eventsAlarm Eventdisconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; SMD; safety exceptionSmart SearchNetworkVideoNetworkVideo CompressionH.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)Network PortRJ-45 (10/100 Base-T)Smart CodecSmart H.265+ Smart H.264+SDK and APIYesAl CodingAl H.265Network ProtocolSMTP; FTP; STP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	AI SSA		,					Alarm	
Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos Network Video Network Network Network Port Smart Codec Smart H.265+ Smart H.264+ Smart H.265+ Smart H.265- Network Protocol SMTP; FTP; STP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	Quick Pick							Alarm Event	disconnection; IP conflict; illegal access; motion
Video Compression H.265; H.264; H.264B; MJPEG (only supported by the sub stream) Smart Codec Smart H.265+ Smart H.264+ Smart H.264+ Al Coding Al H.265 H.265; H.264B; MJPEG (only supported by the sub stream) Network Port SDK and API Yes IPv4; IPv6; HTTP; TCP; UDP; ARP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	Smart Search		intelligent search, event extraction and merging to event						changing; audio detection; voltage detection; SMD;
Smart Codec Smart H.265+ Smart H.264+ Al Coding Al H.265 Specific of the sub stream) Specific of the sub stream in the work Protocol in the sub-stream	Video			Network					
Smart Codec Smart H.263+ Smart H.264+ Al Coding Al H.265 Network Protocol SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	Video Compression							Network Port	RJ-45 (10/100 Base-T)
AL Coding AL H.265 Network Protocol SMTP; FTP; SFTP; DNCP; DNS; DDNS; QoS; UPnP; NTP;	Smart Codec		Smart H.265+					SDK and API	
	Al Coding		AI H.265				Network Protocol	SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP;	

Cyber Security	Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade	
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec	
User/Host	20 (Total bandwidth: 64 M)	
Storage	FTP; SFTP; Micro SD card (support max. 256 G); NAS	
Browser	IE:IE11 Chrome Firefox	
Management Software	Smart PSS; DSS; DMSS	
Mobile Client	IOS; Android	

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B;
	UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

Power

Power Supply	12 VDC/PoE (802.3af)			
Power Consumption	Basic: 4.3 W (12 VDC); 4.9 W (PoE) Max. (WDR + IR intensity + Intelligence): 7.6 W (12 VDC); 8.9 W (PoE)			

Environment

Operating Temperature	$-40~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–40 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F})$ /Less than 95% RH		
Storage Temperature	-40 °C to +60 °C (-40 °F to 140 °F)		
Protection	IP67		

Structure

Casing	Metal	
Product Dimensions	93.6 mm × Φ106.0 mm (3.69" × Φ4.17")	
Net Weight	500 g (1.10 lb)	
Gross Weight	770 g (1.70 lb)	

Accessories

Optional:





PFA217 Ceiling Mount





PFB331C Ceiling Mount



Pole Mount

Junction Mount	Ceiling Mount	Wall Mount
Pole Mount(Vertical)		

Dimensions (mm[inch])



