

IPC-HFW3841T-ZAS-S2

8MP WDR IR Bullet Network Camera













Overview

The IR Megapixel Vari-focal camera delivers 2MP resolution with a $2.7 \text{mm} \sim 13.5 \text{mm}$ varifocal lens.The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

Starlight Technology

For challenging low-light applications, Shogun's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.006lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Intelligent Video analysis (IVS)

Shogun camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

Wide Dynamic Range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.



Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 60m (197ft).

Protection (IP67, wide voltage)

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67), the camera is the choice for installation in even the most unforgiving environments.

Environmental

Shogun cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100,000 s
Min. Illumination	0.007 lux@F1.5 (Color, 30 IRE) 0.0007 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	Up to 60 m (196.85 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°

Lens

Lens Type	Motorized vari-focal
Lens Mount	ф14
Focal Length	2.7 mm-13.5 mm
Max. Aperture	F1.5
Field of View	Horizontal: 109°–30° Vertical: 56° –17° Diagonal: 131° –35°
Iris Control	Fixed
Close Focus Distance	0.8 m (2.62 ft)



IPC-HFW3841T-ZAS-S2

Lens Detect Observe Recognize Identify

8MP WDR IR Bullet Network Camera

	LCIID				,
	W	88.3 m (289.70 ft)	35.3 m (115.81 ft)	17.7 m (58.07 ft)	8.8 m (28.87 ft)
DORI	Т	289.7 m (950.46 ft)	115.7 m (379.59 ft)	57.9m (189.96 ft)	29.0 m (95.14 ft)
Distance	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.				
Intelligend	ce				
IVS (Perimete	er Protection)		usion (support ection of vehicle	the classification and human)	n and
AI SSA		Yes			
Quick Pick				the human/ve rom SMD even	
Smart Search	1			VR to perform action and me	
Video					
Video Compi	ression	H.265; H.264 by the sub st		4B; MJPEG (onl	y supported
Smart Codeo		Smart H.265+ Smart H.264+			
AI Coding		AI H.265 AI H.264			
Video Frame Rate		Main stream: $3840 \times 2160 @ (1-25/30)$ fps Sub stream 1: $704 \times 576 @ (1-25 \text{ fps})/704 \times 480 @ (1-30 \text{ fps})$ Sub stream 2: $1920 \times 1080 @ (1-25/30 \text{ fps})$ *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity			
Stream Capa	bility	3 streams			
Resolution		1728/2592 × 1440); 3M (2 (1920 × 1080	1944); 4M (26 048 × 1536); 3I); 1.3M(1280 ×	2 × 2048); 5M (88 × 1520); 3.6 M (2304 × 1296 960); 720p (12 52 × 288/352 ×	M (2560 × i); 1080p 80 × 720); D1
Bit Rate Conf	trol	CBR/VBR			
Video Bit Rat	e	H.264: 3 kbp: H.265: 3 kbp:			
Day/Night		Auto (ICR)/Co	olor/B/W		
BLC		Yes			
HLC		Yes			
WDR		120 dB			
Scene Self-ad (SSA)	daptation	Yes			
White Balan	ce	Auto; natural custom	; street lamp; o	utdoor; manua	l; regional
Gain Control		Auto			
Noise Reduc	tion	3D NR			
Motion Dete	ection	OFF/ON (4 ar	eas, rectangula	r)	

Image Stabilization	Electronic Image Stabilization (EIS)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
AFSA	Yes
Image Rotation	$0^{\circ}/90^{\circ}/180^{\circ}/270^{\circ}$ (support $90^{\circ}/270^{\circ}$ with 2688×1520 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas
Audio	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; PCM; G.726; G.723
Alarm	
Alarm Event	-ZAS: No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; defocus detection; external alarm; SMD; safety exception -ZS: No SD card; SD card full; SD card error; service life warning (only supported by Dahua card); network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; defocus detection; SMD; safety exception
Network	
Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP;TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPP0E; SAMBA; SNMP; P2P
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
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	SmartPSS Lite; DSS; DMSS
Mobile Client	IOS; Android



IPC-HFW3841T-ZAS-S2

8MP WDR IR Bullet Network Camera

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
Port	

Audio Input	1 channel (RCA port) (Only- ZAS supports)
Audio Output	1 channel (RCA port) (Only- ZAS supports)
Alarm Input	1 channel in: wet contact, 5 mA 3 V–5 VDC (Only- ZAS supports)
Alarm Output	1 channel out: wet contact, 300 mA 12 VDC (Only- ZAS supports)

Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 4 W (12 VDC); 4.9 W (PoE) Max. (WDR + IR intensity + Intelligence): 9.2 W (12 VDC); 10.5 W (PoE)

Environment

Operating Temperature	$-30~^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ (–22 $^{\circ}\text{F}$ 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	244.1 mm × 79.0 mm × 75.9 mm (9.61" × 3.11" × 3.00") (L × W × H)
Net Weight	820 g (1.81 lb)
Gross Weight	1090 g (2.40 lb)

Dimensions (mm[inch])











