

DHI-HY-SAV849HA-E

5MP IR AI-fire Smoke Sensing Network Camera



System Overview

Together with high-performance microprocessor and advanced electronic technology, AI-fire Smoke Sensing Network Camera has the characteristics of high sensitivity and stability. Based on the mounting bracket, it can be easily installed on the ceiling. With built-in high-decibel buzzer, it will send out a sound and light alarm signal in time to remind users to take effective measures immediately when the smoke concentration reaches the alarm setting value.

Functions

Multiple Sensing Technology

This device integrates functions of video surveillance and smoke detection, offering a solution to do the remote check through the camera.

Fire Detection & Alarm

With built-in fire detection function, the camera has the ability to detect fire from a long distance. Because camera integrates smoke sensing chamber and flame detection algorithm, it can provide higher fire detection accuracy and multiple fire prevention methods than general thermal camera.

Lower False Alarm

The smart algorithm of automatic compensation against dust concentration helps reduce false alarms. Based on the advanced chamber technology with dual photoelectric smoke sensing components, the device has higher accuracy rate on smoke detection.

High-quality Video

Supporting 5MP video output, the camera enables users to pinpoint the fire location.

- Remote check based on smoke sensing and video alarm linkage
- Intelligent monitoring: Flame detection
- With split-spectrum smoke chamber and intelligent algorithm, eliminate the false alarm effectively
- Ultra-low power consumption design allows 3-year operation of smoke sensing module with built-in battery
- Built-in high decibel buzzer, smoke alarm is over 85 dB at 3 meters
- Self-test and low battery warning
- Intelligent compensation algorithm relieves the impact of dust accumulation and environment changing on smoke sensing module
- Insect-proof and dust-proof design for smoke sensing module
- Built-in alarm voices, and user can import custom voices
- 5MP 1/2.7" CMOS image sensor, low luminance, and high definition image
- H.265 codec, high compression rate, ultra-low bit rate
- Flip mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- 2/2 Alarm in/out, 1/1 audio in/out; supports max. 256 GB Micro SD card; built-in Mic and speaker
- Flip mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- 12V DC/PoE power supply
- Built-in IR light; the max. IR LEDs Length is 20 m (65.62 ft)



Scene

This device is applicable to most places where both fire alarm and video surveillance are needed, such as:

- Chain stores
- Unattended base stations
- Unmanned power distribution rooms
- ATM areas
- Libraries
- Garbage rooms

Technical Specification			
Smoke Detector			
Indicators	Standby: Green indicator flashes once per minute Fault: Red indicator flashes once per minute Alarm: Red indicator flashes once per second Self-testing: Red indicator flashes once per second		
Protection Area	30 m ² –60 m ²		
Operating Principle	Photoelectric		
Alarm Method	Sound and LED Indicator		
Power	12V DC/PoE and 3V lithium battery		
Operating Current	≤ 30uA (Camera excluded) ≤ 300mA (Camera included)		
Back-up Battery Life	> 3 years		
Alarm Classification	Smoke alarm, fault warning, low battery alarm		
Alarm Sound Pressure	≥ 85 dB (A) @ 3 m (9.84 ft)		
Network Camera			
Appearance	Circular		
Image Sensor	1/2.7" CMOS		
Max. Resolution	2592 (H) × 1944 (V)		
Scanning System	Progressive		
Electronic Shutter Speed	Auto/Manual 1/3s~1/100000s		
Minimum Illumination	0.007Lux (color) 0.003Lux (dark) 0Lux (IR)		
S/N Ratio	> 56 dB		
Illumination Distance	Distance up to 20 m (65.62 ft)		
Illuminator Number	2 (IR LED)		
Lens			
Lens Type	Fixed-focal		
Mount Type	M8		
Focal Length	2.0 mm		
Aperture	F2.0		
Field of View	Horizontal: 144°; Vertical: 92°; Diagonal: 179.6°		
Iris Control	Fixed		
Close Focus Distance	0.2 m (0.66 ft)		
Artificial Intelligence			
AI Event	Flame detection		
Video			
Image Setting	Brightness; contrast; sharpness; saturation; gamma		
OSD	Channel/time/place/voltage of back-up battery		
Video		Manual record; external alarm; alarm video record; timing record	
Micro SD Card		Max. 256 GB	
Compression		H.265; H.264; H.264H; H.264B	
Smart Codec		Smart H.265+/ Smart H.264+	
Frame Rate		Main stream: 2592×1944 (1 fps-20 fps) 2688×1520 (1 fps-25/30 fps) 2560×1440 (1 fps-25/30 fps) 2304×1296 (1 fps-25/30 fps) 1920×1080 (1 fps-25/30 fps) Sub stream: D1 (1 fps-20 fps) D1 (1 fps-25/30 fps) Third stream: 1920×1080 (1 fps-17/24 fps)	
Video Bit Rate		H.264: 32 Kbps-10240 Kbps H.265: 12 Kbps-7168 Kbps	
Day/Night		Auto (ICR)	
BLC		Yes	
HLC		Yes	
WDR		90 dB	
White Balance		Auto/natural/street lamp/outdoor/manual/regional custom	
Gain Control		Auto; manual	
Noise Reduction		3D NR	
Default Frame Rate under Default Resolution		2048 Kbps (2688 × 1520)	
Defog		Yes	
Image rotation, mirroring, flipping		Yes	
Privacy Masking		8 areas	
Language		English; TradChinese; Italian; Spanish; Japanese; Russian; French; German; Portuguese; Turkish; Polish; Romanian; Hungarian; Korean; Czech; Dutch; Ukrainian; Vietnamese; Arabic; SpanishEU; Hebrew; Thai; Bahasa Indonesia	
Audio			
Audio Interface		Yes	
Built-in MIC		Yes	
Built-in Speaker		Yes	
Audio Compression		PCM; G.711a; G.711Mu; G.726; AAC; G.723	
Audio Sampling Frequency		8KHz/16KHz/32KHz/48KHz/64KHz	
Alarm			
Alarm Event		No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; scene changing; audio detection; flame detection; smoke detected alarm; fault warning; smoke alarm disconnected; low battery alarm	
Network			
Communication		1 RJ-45 PoE 10M/100M Ethernet ports	

Protocol	HTTP;TCP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;IPv4/v6;SNMP;QoS;UPnP;NTP
Interoperability	ONVIF; MileStone; Genetec; CGI; PISA
User	10 channels at most
Storage	FTP; SFTP; Micro SD card (256G); NAS
Browser	IE7 and newer versions; Chrome 8+; Firefox 3.5+; Safari 5+
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1X; controlled network access

Certification

Certification	CE-CPR: EN 14604: 2005/AC:2008 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU CE-LVD: Low Voltage Directive 2014/35/EU FCC: 47 CFR FCC Part 15, Subpart B
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Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input Interface	2 channels In: 5mA 5V DC
Alarm Output Interface	2 channels Out: 300mA 12V DC
RS 485 Port	1 channel

Electrical

Operating Power	Adapter: 12V DC(±25%); PoE: 802.3af
Power Supply	DC12V+PoE
Power Consumption	Basic power consumption: 2.1W (12V DC); 2W (PoE) Max. power consumption (ICR + IR LED intensity): 4.9W (12V DC); 4.8W (PoE)

Environmental

Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Operating Humidity	0%–95% RH (non-condensing)

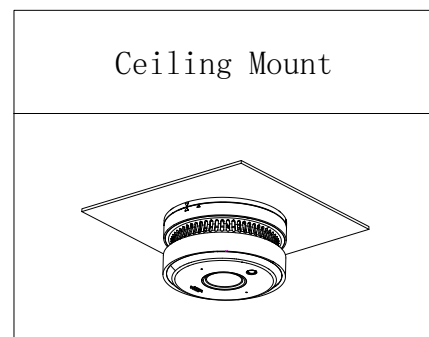
Construction

Casing	Plastic
Product Dimensions	Φ120 mm × 79 mm (Φ4.72" × 3.11")
Package Dimensions	164 mm × 153 mm × 111 mm (6.46" × 6.02" × 4.37")(L × W × H)
Net Weight	442 g (0.98 lb)
Gross Weight	613 g (1.35 lb)
Installation	Ceiling mount
Power Adapter	Excluded
Lens	Included

Ordering Information

Type	Part Number	Description
AI-Fire Smoke Sensing Network Camera	DHI-HY-SAV849HAP-E	5MP IR AI-fire Smoke Sensing Network Camera with PAL standard
	DHI-HY-SAV849HAN-E	5MP IR AI-fire Smoke Sensing Network Camera with NTSC standard
Accessories (optional)	PFM300-E	DC Adapter
	PFM301-E	Power

Installation



Dimensions (mm[inch])

