

# DHI-HY-SAV849HA-ET

## 5MP IR AI-Fire Smoke Sensing Network Camera with Temperature and Humidity Detection



### 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, equipment ambient temperature and humidity reach 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 than general thermal camera.

#### Lower False Alarm

The smart algorithm of automatic compensation against dust concentration helps reduce false alarms. Based on the advanced split-spectrum smoke chamber, 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
- High precision temperature and humidity sensors are used to monitor the temperature and humidity data in the equipment environment
- With split-spectrum smoke chamber and intelligent algorithm, eliminate the false alarm effectively
- Ultra-low power consumption design enables the smoke sensing module to operate for 3 years with only 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 voice, 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
- 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 <sup>2</sup> –60 m <sup>2</sup>
Working Principle	Photoelectric
Alarm Mode	Sound and LED Indicator
Operating Voltage	12V DC/PoE and 3V lithium battery
Operating Current	≤ 30uA (Camera excluded) ≤ 300mA (Camera included)
Battery Life	> 3 years
Alarm Type	Smoke alarm, fault alarm, low battery alarm, heat alarm, humidity alarm
Alarm Volume	≥ 85 dB (A) @ 3 m (9.84 ft)

### Camera

Appearance	Circular
Image Sensor	1/2.7" CMOS
Pixel	5 MP
Max. Resolution	2592 (H) × 1944 (V)
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3s~1/100000s
Min. Illumination	0.002Lux (color) 0.0002Lux (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
Lens Mount	M8
Focal Length	2.0 mm
Max. 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)

### Smart Event

AI Event	Flame detection
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### Video

Video Compression	H.265; H.264; H.264H; H.264B
Smart Codec	Smart H.265+ / Smart H.264+

Video 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)/Color/B/W
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 Bit Rate with Default Resolution	2048 Kbps (2688 × 1520)
Image Rotation	Yes
Image Flip	Yes
Mirror	Yes
Rotation	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, Spanish(Europe), Hebrew, Thai, Bahasa Indonesia

### Audio

Audio Port	Yes
Built-in MIC	Yes
Built-in Speaker	Yes
Audio Compression	PCM; G.711a; G.711Mu; G.726; AAC; G.723
Audio Sampling	8KHz/16KHz/32KHz/48KHz/64KHz

### Alarm

Alarm	Yes
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; heat detection; humidity detection; smoke detected alarm; fault alarm; smoke alarm disconnected; low battery alarm

### Network

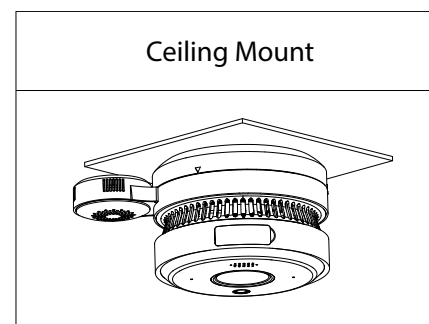
Network Port	1 RJ-45 PoE 10M/100M Ethernet ports
Network Protocol	HTTP;TCP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP;DNS;DDNS;IPv4/v6;SNMP;QoS;UPnP;NTP
Interoperability	ONVIF; MileStone; Genetec; CGI; PISA

User/Host	10 channels at most
Storage	FTP; SFTP; Micro SD card (256G); NAS
Browser	IE7 and newer versions; Chrome 8+; Firefox 3.5+; Safari 5+
<b>Function</b>	
Image Setting	Brightness; Contrast; Sharpness; Saturation; gamma
OSD Overlay	Channel title / time title / geographical location / battery voltage / heat / humidity
Record Mode	Manual record; video detection record; schedule record; alarm record Record priority: Manual > external alarm > video detection > schedule
Micro SD Card (Max.)	256 GB
Default	Support one-click restore
User Management	Up to 20
Security	Username and password; MAC address; HTTPS; IEEE802.1x; network access control
<b>Certification</b>	
Certification	CE-CRP: EN 14604:2005/AC:2008 CE-LVD: EN 62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
<b>Port</b>	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channels In: 5mA 3V–5V DC
Alarm Output	2 channels Out: 300mA 12V DC
RS-485 Port	1 (baud rate range:1200 bps–115200 bps)
<b>Power</b>	
Operating Voltage	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)
<b>Environment</b>	
Operating Temperature	–10°C to +55°C (+14°F to +131°F)
Operating Humidity	0%–95% RH (non-condensing)
<b>Structure</b>	
Casing Material	Plastic
Product Dimensions	175.3 mm×120.0 mm×81.6 mm(6.9" × 4.72" × 3.21")
Packaging Dimensions	205 mm × 148 mm × 111 mm (8.06" × 5.82" × 4.37")(L × W × H)
Installation	Ceiling mount
Power Adapter	Optional
Lens	Standard

## Ordering Information

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

## Installation



## Dimensions (mm[inch])

