

DHI-HY-FT121LD

Flame Detection Network Camera



- Uncooled VOx thermal sensor technology
- Flame detection with adjustable and high sensitivity
- Support GB/T 28182 and ONVIF, convenient for integration
- WDR, 3D NR, applicable to various monitoring scenes
- Support tracking flame position
- Flame detection with adjustable sensitivity
- Strobe light & audio and remote intercom
- Built-in 1/1 alarm in/out, flexible alarm linkage
- IP66, PoE
- Built-in alarm voices, and user can import custom voices
- 2MP 1/2.7" CMOS image sensor, low luminance, and high definition image
- 12V DC/PoE power supply
- Built-in IR light; the max. IR LEDs Length is 15 m (49.21 ft)

System Overview

Together with Visible and Thermal technology, this flame detection network camera provides an all-in-one solution for video surveillance. This camera has the ability to detect flame from long range, supports flame tracking and positioning, and provides intelligent visual and audible warning. Featuring remote intercom and alarm input/output functionality, it realizes convenient linkage.

Scene

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

- Community
- Shopping mall
- Warehouse
- Libraries and archive rooms
- Garbage rooms

Functions

Uncooled VOx Technology

Dahua flame detection cameras use uncooled VOx sensor technology. The detector is small-sized, and highly sensitive allowing the camera to detect the flame on a monitored site.

Flame Detection

Integrating thermal and video surveillance, detect flame based on abnormal temperature and conform details through the camera.

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua 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.

Visible and Audible Alarm Notification

Supports the light alarm and voice alarm when flame is detected, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

Flame Tracking

Identifying and positioning flame.

Remote Intercom

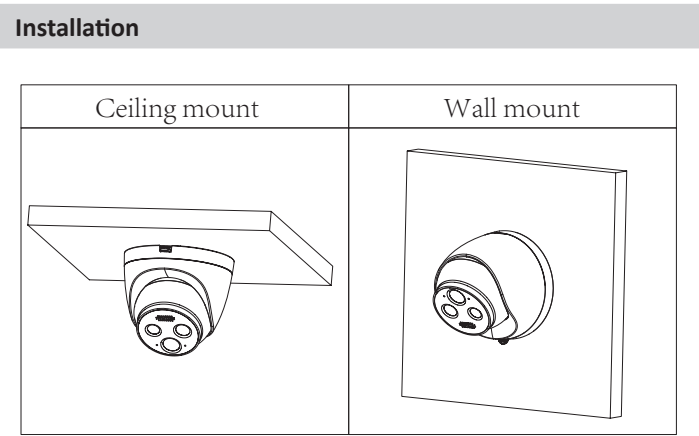
Built-in MIC and speaker enable remote intercom between software platform and App.

Alarm Output

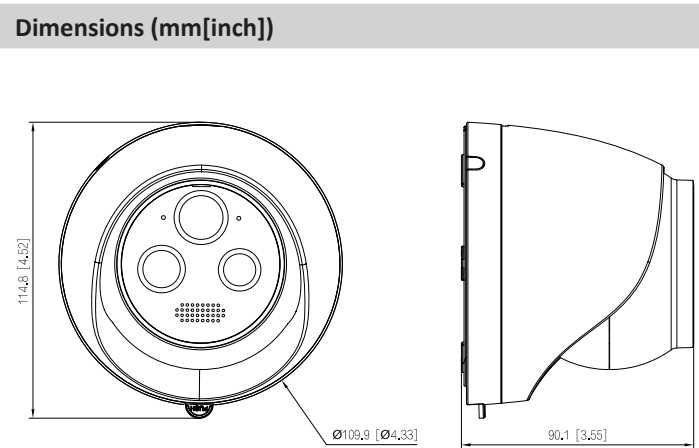
Built-in alarm input and output port to realize linkage output.

Technical Specification		Illuminator Angle	
Thermal		100°	
Detector Type	Vanadium oxide uncooled focal plane detector	Audio and Video	
Effective Pixels	120 (H) × 90 (V)	Video Compression	H.265; H.264; H.264H; H.264B; MJPEG
Pixel Pitch	17 μm	Resolution	Visible: Main stream: 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576); 1920×1080 by default Sub stream: 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288); 352 × 288 by default
Spectral Range	8 μm–14 μm	Video Frame Rate	Visible: Main stream: 1 fps–25 fps adjustable, 25 fps by default Sub stream: 1 fps–25 fps adjustable, 15 fps by default
Sensitivity (NETD)	< 60mK@f/1.0	Audio Compression	G.711a; G.711mu; AAC; PCM
Focal Length	1.2 mm	Image Encoding Format	JPEG
Field of View	Horizontal: 90° Vertical: 67.5°	Function	
Thermal Focus Control	Fixed-focal	Two-way Audio	Yes
Field of Depth	> 3 cm	Visible and Audible Alarm	Yes
Aperture	F1.1	Network Protocol	HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
Flame Detection Distance	10 m: 10 cm × 10 cm	Interoperability	ONVIF; GB/T28181; CGI; Dahua SDK
Visible		Browser	IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier
Image Sensor	1/2.7" CMOS	User/Host	Up to 10 (total bandwidth: 100 MB)
Max. Resolution	1920 (H) × 1080 (V)	Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
Pixel	2 MP	User Management	Up to 10 users; supports multi-level user permissions (2 levels): management group and user group
Min. Illumination	Color: 0.05 lux B/W: 0.005 lux 0 lux (IR on)	Malfunction Detection	Network disconnection detection; IP conflict detection
Visible AGC	Auto; Manual	Intelligence	
Visible Noise Reduction	2D NR; 3D NR	Flame Detection	Yes
S/N Ratio	≥ 55 dB	Cold/Hot Spot Trace	Yes
Electronic Shutter Speed	1 s–1/30,000 s (manual/auto)	Port	
BLC	Yes	Network Port	1 × RJ-45 (10/100 Base-T)
WDR	DWDR	Alarm Input	1 channel
HLC	Yes	Alarm Output	1 channel
Day/Night	Auto (ICR); Color and B/W	Alarm Linkage	Relay output/Email/Snapshot
Iris Control	Fixed	Alarm Event	Local audible and visual alarm notification
Image Flip	90°; 180°; 270°	Power	
Exposure Compensation	Yes	Power Supply	12 VDC ± 20%; PoE
Visible Focus Control	Fixed-focal	Power Consumption	Basic: 4.5 W (12 VDC, LED off) Max.: 10.1 W (12 VDC, LED on, heat on)
Focal Length	4 mm	Environment	
Field of View	H: 86° V: 46° D: 101°	Operating Temperature	–20°C to +60°C (–4°F to +140°F)
Close Focus Distance	1 m (3.28 ft)	Operating Humidity	≤ 95%
Aperture	F1.6	Storage Temperature	–20°C to +70°C (–4°F to +158°F)
Illuminator	IR		
Illuminator On/Off Control	Auto; Manual		
Illumination Distance	15 m (49.21 ft)		

Construction	
Protection	IP66, anti-surge 2 kV; anti-elctrostatic 6 kV (touched by objects); anti-elctrostatic 8 kV (air)
Product Dimensions	φ110mm × 88.6mm (φ4.33" × 3.49")
Net Weight	≤ 0.85 kg (1.87 lb)
Gross Weight	≤ 1 kg (2.20 lb)
Installation	Ceiling mount
Power	Optional
Lens	Included
Bracket	Junction mount: PFA130-E



Ordering Information		
Type	Part Number	Description
Flame Detection Network Camera	DHI-HY-FT121LDP	Flame Detection Network Camera with PAL standard
	DHI-HY-FT121LDN	Flame Detection Network Camera with NTSC standard
Accessories (optional)	PFM300-E	DC Adapter
	PFM301-E	Power



Accessories

Optional:



PFM300-E
DC Adapter



PFM301-E
Power