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

Thermal

Detector Type	Vanadium oxide uncooled focal plane detector
Effective Pixels	120 (H) × 90 (V)
Pixel Pitch	17 μm
Spectral Range	8 μm–14 μm
Sensitivity (NETD)	< 60mK@f/1.0
Focal Length	1.2 mm
Field of View	Horizontal: 90° Vertical: 67.5°
Thermal Focus Control	Fixed-focal
Field of Depth	> 3 cm
Aperture	F1.1
Flame Detection Distance	10 m: 10 cm × 10 cm

Visible

Image Sensor	1/2.7" CMOS
Max. Resolution	1920 (H) × 1080 (V)
Pixel	2 MP
Min. Illumination	Color: 0.05 lux B/W: 0.005 lux 0 lux (IR on)
Visible AGC	Auto; Manual
Visible Noise Reduction	2D NR; 3D NR
S/N Ratio	≥ 55 dB
Electronic Shutter Speed	1 s–1/30,000 s (manual/auto)
BLC	Yes
WDR	DWDR
HLC	Yes
Day/Night	Auto (ICR); Color and B/W
Iris Control	Fixed
Image Flip	90°; 180°; 270°
Exposure Compensation	Yes
Visible Focus Control	Fixed-focal
Focal Length	4 mm
Field of View	H: 86° V: 46° D: 101°
Close Focus Distance	1 m (3.28 ft)
Aperture	F1.6
Illuminator	IR
Illuminator On/Off Control	Auto; Manual
Illumination Distance	15 m (49.21 ft)
Illuminator Angle	100°

Audio and Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG
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
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
Audio Compression	G.711a; G.711mu; AAC; PCM
Image Encoding Format	JPEG

Function

Two-way Audio	Yes
Visible and Audible Alarm	Yes
Network Protocol	HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP
Interoperability	ONVIF; GB/T28181; CGI; Dahua SDK
Browser	IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier
User/Host	Up to 10 (total bandwidth: 100 MB)
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access
User Management	Up to 10 users; supports multi-level user permissions (2 levels): management group and user group
Malfunction Detection	Network disconnection detection; IP conflict detection

Intelligence

Flame Detection	Yes
Hot Spot Trace	Yes

Port

Network Port	1 × RJ-45 (10/100 Base-T)
Alarm Input	1 channel
Alarm Output	1 channel
Alarm Linkage	Relay output/Email/Snapshot
Alarm Event	Local audible and visual alarm notification

Power

Power Supply	12 VDC ± 20%; PoE
Power Consumption	Basic: 4.5 W (12 VDC, LED off) Max.: 10.1 W (12 VDC, LED on, heat on)

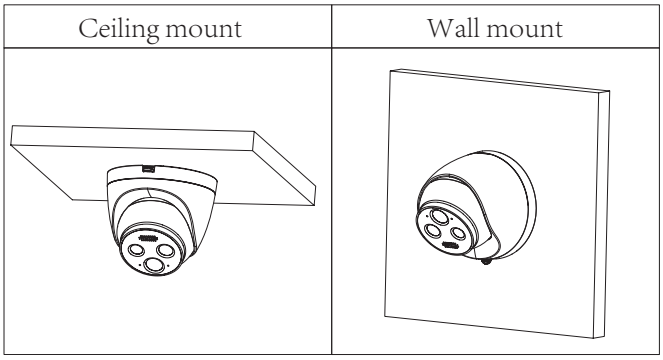
Environment

Operating Temperature	–20°C to +60°C (–4°F to +140°F)
Operating Humidity	≤ 95%
Storage Temperature	–20°C to +70°C (–4°F to +158°F)

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

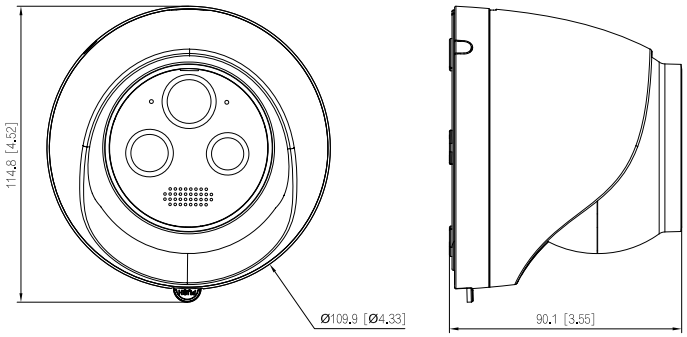
Installation



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

Dimensions (mm[inch])



Accessories

Optional:

PFM300-E
DC Adapter

PFM301-E
Power

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