

DHI-HY-FT431LFP

Flame Detection Network Camera



SK C€

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 cold and hot spot alarm function and industrial temperature detection alarm functions, enables flame tracking and positioning, and provides intelligent visual and audible warning. Featuring remote intercom and alarm input/output functionality, it realizes convenient linkage.

Functions

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.

Sound and LED Indication

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.

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.

- \cdot Industry leading uncooled VOx focal plane detector with high sensitivity
- · Supports fire detection alarm, cold and hot spot alarm, and industrial temperature detection alarm functions
- · Supports sound and LED indication, and supports binocular fusion
- · Visible light adopts a 4MP 1/2.7 inch CMOS image sensor, which has good low illumination effect and high image clarity
- · Support multi-level user management, humanized monitoring, confidentiality, and permission management
- · Supports H.265 encoding with high compression ratio, achieving ultralow bitstream transmission
- · Supports 1-way alarm input and 1-way alarm output functions, sup ports max. 256 G Micro SD card
- · Built in MIC and high volume speakers, high decibel alarm sound 70dB
 ≥ 1m (A-weighted)
- · Built in high-efficiency infrared fill light, with a maximum infrared monitoring distance of 25 meters
- · Supports DC12V/POE power supply mode for easy engineering instal lation
- · Supports IP67 protection level

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

| 1. Support real-time point temperature detection function 2. There are three rules for measuring temperature simultaneously: points, lines, and polygons 3. Supports temperature alarm function 4. Supports cold and hot spot alarm function 5. The temperature detection unit is Fahrenheit and Celsius, which can be set Visible Visible Image Sensor 1/2.7" CMOS 1/2.7" CMOS Max. Resolution 2688(H)×1520(V) Pixel 1. Supports real-time point temperature detection function function function simultaneously: points, lines, and polygons and polygons grow of G.726 Image Encoding Format Audio Sampling 8K; 16K Function Yes Pixel 4 MP Sound and Light Alarm Yes | Technical Specification | | Electronic Shutter Speed | 1/3 s-1/100000 s (manual/auto) |
|--|----------------------------|---|----------------------------|--|
| Type | General | | BLC | Yes |
| Thermal | Appearance | Bullet | WDR | DWDR |
| Processor Type | Туре | Radiometry | HLC | Yes |
| Files 120 (10 × 90 / 10 × 10 / 10 × 10 / 10 × 10 × 10 × 1 | Thermal | | Day/Night | Auto (ICR); Color and B/W |
| Mage sign 100 | Detector Type | Vanadium oxide uncooled focal plane detector | Iris Control | Fixed |
| Pacific 17 µm | Effective Pixels | 120 (H) × 90 (V) | Image Flip | |
| Spectral Range 8 µm = 14 µm Visible Focus Control Decided Sensitivity (NETD) < 60mk (@17.0.300x) | Pixel Pitch | 17 μm | Exposure Compensation | |
| Sensitivity (NETD) < | Spectral Range | 8 μm−14 μm | | |
| Field of View Horizonia: 90° Horizo | Sensitivity (NETD) | < 60mK (@f/1.0, 300K) | | |
| Protection Protection Protection Protection Process Pr | Focal Length | 1.2 mm | rocal Echigan | |
| Thermal Posus Control Close Focus Distance O.5 m (1.65 ft) Aperture File Audio and Video Auto, Manual Illumination Distance 25 m (80.35 ft) Audio and Video Audio Aperture Audio Compression Audio Co | Field of View | | Field of View | |
| Close Focus Distance 0.5 m (1.65 ft) | Thermal Focus Control | Fixed-focal | Close Focus Distance | 1 m (3.28 ft) |
| File Aperture File Fil | Close Focus Distance | 0.5 m (1.65 ft) | Aperture | F1.6 |
| Flame Detection Distance 10 m, Jame size of 10 cm x 10 cm Thermal Noise Reduction 30 NR Normal, Corridor mode, reflection Supports 12 adjustable pseudo colors including Wither Heat, Lay, Iron Red, Hot Iron, Medical, Arctic, Rainbow, Black Heat, Human Screening, Red Paint, Blue Heat, and Green Heat Temperature Detection Range 10°C to +200°C (+14°F to 392°F) Temperature Detection Accuracy MAX (£5°C, £5%) 1. Support real-time point temperature detection function 2. There are three rules for measuring temperature simultaneously: points, lines, and polygons 3. Supports temperature detection unit is Fahrenheit and 5. The temperature detection in the Supports of and hot sport alarm function 5. The temperature detection unit is Fahrenheit and 5. The temperature detection in the Supports of and hot sport alarm function 5. The temperature detection unit is Fahrenheit and 5. The temperature detection unit is Fahrenheit and 5. Supports temperature detection unit is Fahrenheit and 5. The temperature detection in this Fahrenheit and 5. The tempe | Aperture | F1.1 | Illuminator Type | 2 (IR LED) |
| Image Flip Normal, corridor mode, reflection Supports 12 adjustable pseudo colors including White Heat, Law, Iron Red, Hot Iron, Medical, Arctic, Rainbow, Black Heat, Human Screening, Red Paint, Blue Heat, and Green Heat Wisible: Main stream: (MA (2688-15.20)/10809 (1920 × 200), default (1920 × 200) | Flame Detection Distance | 10 m, flame size of 10 cm x 10 cm | Illuminator On/Off Control | Auto; Manual |
| Image Flip Normal, corridor mode, reflection Normal, corridor mode, reflection Supports 12 adjustable pseudo colors including White Heat, Lava, Iron Red, Hot Iron, Medical, Arctic, Rainbow, Black Heat, Human Screening, Red Paint, Blue Heat, and Green Heat Wisible: Mann atream: (4M (2689x1520)/1080P (1920 × 1080)/1.3M (1820 × 960)/720P (1280 × 720), default (1920 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080)/720P (1280 × 720), default (1920 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 576)/WGA (640x480)/CIF (1820 x × 1080) Substream: (10 1 700 x × 1080) Substream: (10 | Thermal Noise Reduction | 3D NR | Illumination Distance | 25 m (80.35 ft) |
| Supports 12 algustable pseudo clor's including White Heart, Law, Jenn Red, Holt (no.) Medical, Artick, Rainbow, Black Heat, Human Screening, Red Paint, Blue Heat, and Green Heat Blue Heat, and Green | Image Flip | Normal, corridor mode, reflection | Audio and Video | |
| Temperature Detection Range | Color Palettes | White Heat, Lava, Iron Red, Hot Iron, Medical, Arctic, Rainbow, Black Heat, Human Screening, Red Paint, | · | Visible: Main stream: (4M (2688×1520)/1080P (1920 × |
| Accuracy MAX (15°L, 15%) I. Support real-time point temperature detection function 2. There are three rules for measuring temperature simultaneously: points, lines, and polygons 3. Supports temperature alarm function 4. Supports cold and hot spot alarm function 5. The temperature detection unit is Fahrenheit and cleistis, which can be set Visible Video Frame Rate Addio Compression MP6C2-Layer2; G.711a; G.711mu; AAC; PCM; G.722.1; G.722.1; G.726 Video Frame Rate Addio Compression MP6C2-Layer2; G.71a; G.71mu; AAC; PCM; G.722.1; G.726 Video Frame Rate Vide | | -10°C to +200°C (+14°F to 392°F) | Resolution | (1920 × 1080) Sub stream: (D1 (704 × 576)/VGA (640x480)/CIF |
| Temperature Detection Mode Inage Sensor In | · · | | Video Frame Rate | Main stream: 1 fps-25 fps adjustable, 25 fps by default |
| Mage Encoding Format JPEG | Tomporatura Dataction Mada | function 2. There are three rules for measuring temperature simultaneously: points, lines, and polygons 3. Supports temperature alarm function 4. Supports cold and hot spot alarm function 5. The temperature detection unit is Fahrenheit and | Audio Compression | MPEG2-Layer2; G.711a; G.711mu; AAC; PCM; G.722.1; G.726 |
| Visible Function Image Sensor 1/2.7" CMOS Built-in MIC Yes Max. Resolution 2688(H)×1520(V) Built-in Speaker Yes Pixel 4 MP Sound and Light Alarm Yes Scanning System Progressive Network Protocol HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP, FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP, QoS; UPnP; NTP Min. Illumination SOURS Blux Olux (IR on) Privacy Masking Yes (4 areas) Visible AGC Auto; Manual Storage FTP; NAS; SFTP Visible Noise Reduction 2D NR; 3D NR Interoperability ONVIF; CGI; Wisualarm S/N Ratio ≥ 55 dB Browser IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier White Balance Auto/indoor/outdoor/track/manual/natural/street | remperature Detection Mode | | Image Encoding Format | JPEG |
| Image Sensor 1/2.7" CMOS Built-in MIC Yes Max. Resolution 2688(H)×1520(V) Built-in Speaker Yes Sound and Light Alarm Yes Scanning System Progressive Network Protocol FTP; DHCP; DNS; DDNS; PPPOE; IPV4/v6; SNMP; QoS; UPnP; NTP Min. Illumination B/W: 0.0028 lux O lux (IR on) Visible AGC Auto; Manual Storage FTP; NAS; SFTP Visible Noise Reduction 2D NR; 3D NR S/N Ratio 255 dB White Balance Auto/indoor/outdoor/track/manual/natural/street | | | Audio Sampling | 8K; 16K |
| Max. Resolution 2688(H)×1520(V) Built-in Speaker Yes Pixel 4 MP Sound and Light Alarm Yes Scanning System Progressive Network Protocol HTTPS; HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP, FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP Min. Illumination B/W: 0.0028 lux 0 lux (IR on) Privacy Masking Yes (4 areas) Visible AGC Auto; Manual Storage FTP; NAS; SFTP Visible Noise Reduction 2D NR; 3D NR Interoperability ONVIF; CGI; Wisualarm S/N Ratio ≥ 55 dB Browser IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier White Balance Auto/indoor/outdoor/track/manual/natural/street | Visible | | Function | |
| Pixel 4 MP Sound and Light Alarm Yes Scanning System Progressive Network Protocol FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP Min. Illumination B/W: 0.0028 lux Olux (IR on) Visible AGC Auto; Manual Street Properties of Browser Properties of Browser White Balance Auto/indoor/outdoor/track/manual/natural/street | Image Sensor | 1/2.7" CMOS | Built-in MIC | Yes |
| Scanning System Progressive Network Protocol Privacy Masking Privacy Masking Visible AGC Auto; Manual Storage Privacy Masking Storage FTP; NAS; SFTP Interoperability ONVIF; CGI; Wisualarm S/N Ratio Storage Browser Browser Auto/indoor/outdoor/track/manual/natural/street | Max. Resolution | 2688(H)×1520(V) | Built-in Speaker | Yes |
| Scanning System Progressive Network Protocol FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS, UPnP; NTP Color: 0.0052 lux B/W: 0.0028 lux O lux (IR on) Visible AGC Auto; Manual Storage FTP; NAS; SFTP Interoperability ONVIF; CGI; Wisualarm S/N Ratio S/S dB Browser White Balance Network Protocol FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS, UPnP; NTP Frivacy Masking Yes (4 areas) Ves (4 areas) FTP; NAS; SFTP ONVIF; CGI; Wisualarm IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier Firefox: 42 and earlier | Pixel | 4 MP | Sound and Light Alarm | Yes |
| Min. Illumination B/W: 0.0028 lux O lux (IR on) Privacy Masking Yes (4 areas) Visible AGC Auto; Manual Storage FTP; NAS; SFTP Visible Noise Reduction 2D NR; 3D NR Interoperability ONVIF; CGI; Wisualarm S/N Ratio ≥ 55 dB Browser IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier White Balance Auto/indoor/outdoor/track/manual/natural/street | Scanning System | - | Network Protocol | |
| Visible AGC Auto; Manual Visible Noise Reduction 2D NR; 3D NR Interoperability ONVIF; CGI; Wisualarm S/N Ratio ≥ 55 dB Browser IE: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 and earlier White Balance Auto/indoor/outdoor/track/manual/natural/street | Min. Illumination | B/W: 0.0028 lux | Privacy Masking | Yes (4 areas) |
| Visible Noise Reduction S/N Ratio ≥ 55 dB Browser E: IE 9 and later (Edge is not supported) Chrome: 42 and earlier Firefox: 42 an | Visible AGC | Auto; Manual | Storage | FTP; NAS; SFTP |
| S/N Ratio ≥ 55 dB Browser Chrome: 42 and earlier Firefox: 42 and earlier White Balance Auto/indoor/outdoor/track/manual/natural/street | Visible Noise Reduction | 2D NR; 3D NR | Interoperability | ONVIF; CGI; Wisualarm |
| White Balance | S/N Ratio | | Browser | Chrome: 42 and earlier |
| | White Balance | | User/Host | Up to 10 (total bandwidth: 100 MB) |

Camera | DHI-HY-FT431LFP

| Default | Support one-click restore |
|-----------------------|---|
| Security | Username and password; MAC address; HTTPS; IEEE802.1x; network access control |
| User Management | Up to 10 users |
| Malfunction Detection | ICON network disconnection detection; IP conflict detection |
| Intelligence | |

| Heat Detection | Yes |
|-------------------------------------|-----------------|
| Heat Detection Distance (recommend) | 10 m (32.81 ft) |

Port

| Network Port | 1 RJ-45 PoE 10M/100M Ethernet ports |
|---------------|--------------------------------------|
| Alarm Input | 1 channel in: 5mA 3V–5V DC |
| Alarm Output | 1 channel out: 300mA 12V DC |
| Alarm Linkage | Trigger switch output/email/snapshot |

Power

| Power Supply | DC12V(±30%)/POE |
|-------------------|------------------------------|
| Power Consumption | Basic: 1.8 W Max.: 5.16 W |

Environment

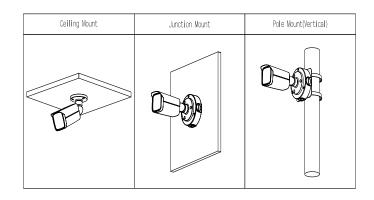
| Operating Temperature | -40°C to +60°C (-40°F to +140°F) |
|-----------------------|----------------------------------|
| Operating Humidity | ≤ 95% |

Construction

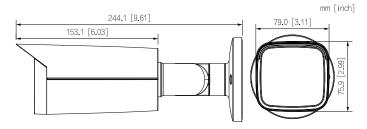
| Protection | IP67 |
|----------------------|--|
| Product Dimensions | 244.1 mm×79.0 mm×75.9 mm (9.61" × 3.11" ×2.99") |
| Packaging Dimensions | 307.0 mm×155.0 mm×143.0 mm (12.09" × 6.10" × 5.63")(L × W × H) |
| Net Weight | 0.8 kg (1.77 lb) |
| Gross Weight | 1.1kg (2.43 lb) |
| Installation | Wall mount; Ceiling mount; Vertical pole mount |
| Power Adapter | Optional |
| Lens | Standard |
| Certifications | CE; UKCA |

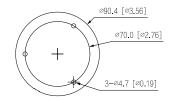
| Ordering Information | | |
|-----------------------------------|-----------------------|--------------------------------|
| Туре | Part Number | Description |
| Flame Detection Network Camera | DHI-HY-FT431LFP-TD1F4 | Flame Detection Network Camera |
| Accessories (optional) | PFM321D | 12 VDC 1A Power Adapter |
| | PFA130-E | Water-proof Junction Box |
| | PFA152-E | Pole Mount Bracket |
| | DHI-TF-P100 | Dahua micro SD Card P100 256GB |

Installation



Dimensions (mm[inch])





Accessories

Optional:







PFA130-E Water-proof Junction Box

PFA152-E Pole Mount Bracket DHI-TF-P100 Micro SD Card P100 256GB



PFM321D 12 VDC 1A Power Adapter