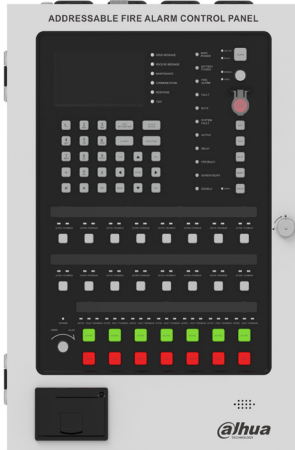


# DHI-HY-1022/DHI-HY-1025

## Addressable Fire Alarm Control Panel



- Two-wire and polarity-free wiring: It integrates power and communication without external supply, offering robust anti-interference, simplified installation, lower costs, and easier maintenance, to enhance reliability and operational efficiency
- Intuitive display: 4.3" LCD (480×272) provides intuitive operation with tool-free system setup
- Extended event logging: Long-term storage with flexible query/print by time, type, and other parameters
- Intelligent dual-power system: Automatic main/backup switching with charge-discharge management ensures uninterrupted fire protection power
- Protection design: Short circuit, open circuit and overcurrent protection to ensure stable operation
- Designed in accordance with EN54-2 and EN54-4 standards

### System Overview

Addressable Fire Alarm Control Panel is designed to provide early warning fire detection, display fire information and inform people to evacuate. With two-wire and polarity-free technology, it connects with other mated products to construct a fire alarm control system. This system offers flexibility in both design and operation to meet the demands of various projects.

### Functions

#### IOT Solution

Compatible with Dahua DSS Pro platform and Wisualarm Business platform, to realize CCTV&Fire Alarm linkage and the one-stop management.

#### Power Supply Management

Smart power supply management offers main power supply and backup power supply monitoring, automatically switch power supply, power supply fault reporting, and backup power supply protection.

#### Editable Alarm Linkage

The linkage strategy is flexible, meeting the fire linkage requirements of complex buildings. It can be edit by the Panel directly or by the configuration software.

#### Comprehensive Interface Options

1\*USB port, 1\*network port, 1\*fault interface (28VDC); 7\*fire alarm interface (28VDC); 7\*I/O module interface; 1\*DC28V 2A; 2\*RS485; 1\*RS232; 2\*CAN.

### Scene

- Large Public Venues: Including shopping malls, exhibition halls, stadiums, and convention centers;
- High-Rise Building;
- Complexes: Such as office towers, hotels, medical centers, and mixed-use developments;
- Industrial Facilities: Factories, warehouses, logistics hubs, and data centers;
- Transportation Infrastructure: Metro systems, tunnels, and underground passages with extended detection loops for specialized wiring needs;
- Educational & Residential Campuses: Centralized monitoring and control for multi-building facilities, including schools, universities, and residential communities.

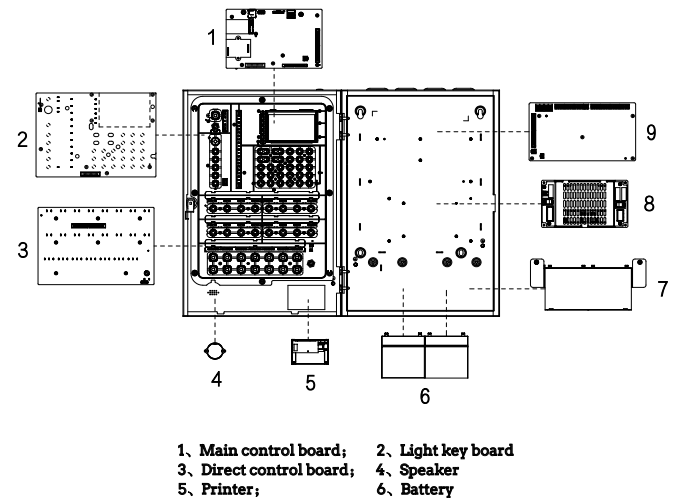
### Technical Specification

|                         |                                                                                      |
|-------------------------|--------------------------------------------------------------------------------------|
| Main Power Supply       | AC90-240V/50Hz, 60Hz                                                                 |
| Backup Power            | 2 lead-acid batteries (12V/5Ah each)                                                 |
| Log Record              | Max. 2048                                                                            |
| Display Mode            | 480 × 272 4.3" LCD screen                                                            |
| Working Voltage         | DC 12V~48V                                                                           |
| Communication Mode      | Two bus line                                                                         |
| Platform Access         | 4G, Ethernet                                                                         |
| Networking Mode         | RS485                                                                                |
| Communication Interface | USB, RJ45, CAN, RS232, RS485, One fire alarm output and one fault output             |
| Load Capacity           | Loop Number: 1 or 2<br>Zone Number: 0, 8 or 16<br>Device Linkage Terminals: 7 groups |
| Storage Capacity        | 9,999 historical records                                                             |
| Communication Distance  | 1500 m                                                                               |
| Shell Material          | Chassis: Cold-rolled steel plate SPCC                                                |
| Dimensions              | 550 mm×460 mm×1707 mm                                                                |
| Operating Temperature   | -10°C to +55°C                                                                       |
| Storage Temperature     | -20°C to +65°C                                                                       |
| Operating Humidity      | ≤ 95% RH (no condensation)                                                           |
| Compliance Standard     | EN54-2, EN54-4                                                                       |

### System Specification

|                                         |                                                                                                                                              |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Loop Number                             | 1 loop for DHI-HY-1022(R)<br>2 loops for DHI-HY-1025(R)                                                                                      |
| Topology Mode                           | Class A for DHI-HY-1022R and DHI-HY-1025R<br>Class B for DHI-HY-1022 and DHI-HY-1025                                                         |
| Loop Capability                         | Max. 254 sensors and modules for each loop                                                                                                   |
| Optional Built-in Micro Thermal Printer | Option 1: With printer by default<br>Option 2: Without printer by default                                                                    |
| Simulated Zone                          | Every 32 addresses form a zone<br>Applicable only to panels with a printer                                                                   |
| Panel Cascading                         | Max. 128 panels to cascade                                                                                                                   |
| Solution Verification                   | With the help of Dahua Fire (Wisualarm) Presale Tool<br>Performance Limitations<br>Communication Distance<br>Required Battery Specifications |
| Configurable Alarm Linkage              | With the help of ControlConfig Tool                                                                                                          |
| IOT Solution                            | Online Solution: Wisualarm Cloud Platform<br>Local Solution: DSS Pro Platform V8.5-V8.7 (Server is required)                                 |
| Compatible Cable Specifications         | 2X1.5mm <sup>2</sup> /2X16AWG                                                                                                                |
| Communication Distance                  | 1500m (standard) - 3000m (extendable)                                                                                                        |
| Telephone&Broadcast System              | Optional peripheral system                                                                                                                   |

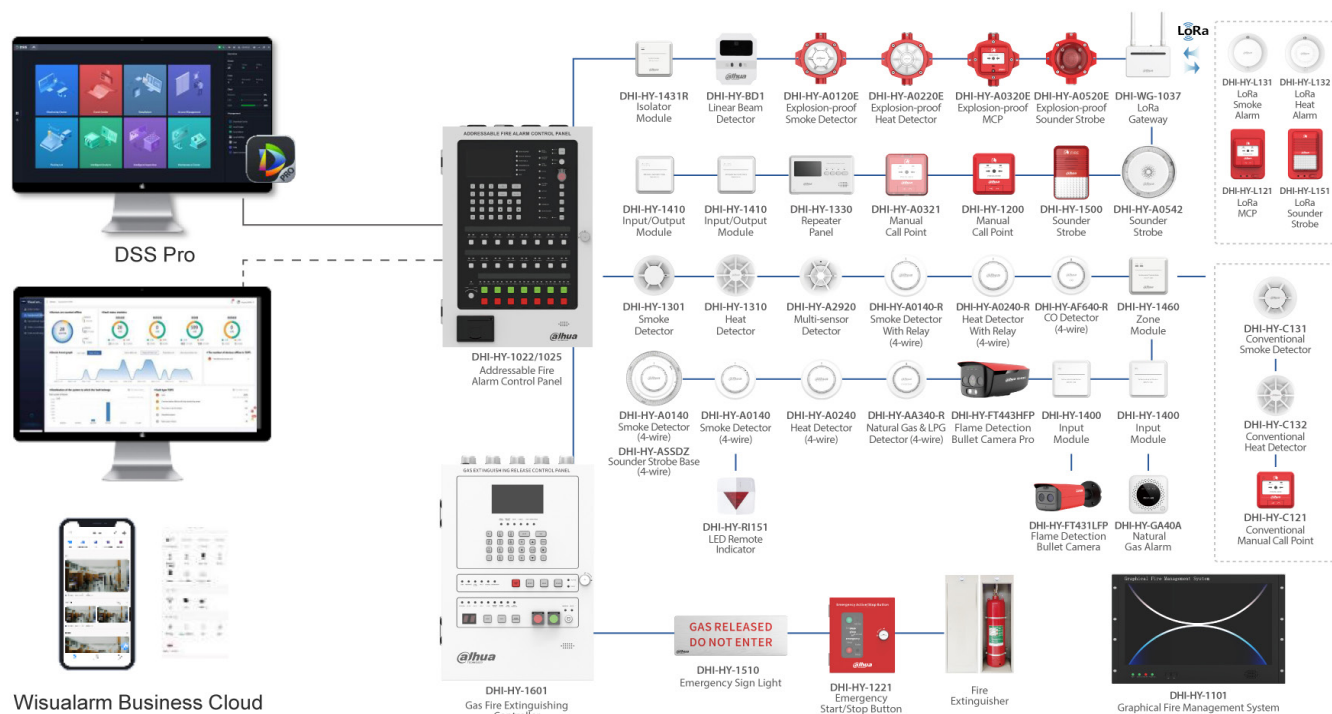
### Panel Overview



### Cascading

Fire alarm control panels are cascaded through RS-485 ports, with a maximum of 128 panels that can be cascaded.





## Device List

### 2W-B Multi-spectral Photoelectric Smoke Detector (DHI-HY-1301)

1. Adjustable sensitivity from high or low
2. Multi-spectral technology for better effect
3. Certified to EN54-7
4. Max. Number of Device Connections for a Loop: 254

### 2W-B Heat Detector (A2R) (DHI-HY-1310)

1. Fixed temperature detection threshold: 62°C
2. Class A2 rate-of-rise detection: K-linear response
3. Certified to EN54-5
4. Max. Number of Device Connections for a Loop: 254

### 2W-B Muti-sensor Detector (Smoke&Heat) (DHI-HY-1320)

1. A2R heat detection
2. Combines Split-spectrum optical smoke sensor and sensitive thermistor, detect smoke and heat in the same time
3. Certified to EN54-5 & EN54-7
4. Max. Number of Device Connections for a Loop: 254

### 4W-B Multi-spectral Photoelectric Smoke Detector (Remote Indicator) (DHI-HY-2301)

1. Adjustable sensitivity from high or low
2. Multi-spectral technology for better effect
3. Compatible with remote indicator
4. Certified to EN54-5
5. Max. Number of Device Connections for a Loop: 254

### 4W-B Heat Detector (A2R) (Remote Indicator) (DHI-HY-2311)

1. Fixed temperature detection threshold: 62°C
2. Class A2 rate-of-rise detection: K-linear response
3. Compatible with remote indicator
4. Certified to EN54-7 (applying)
5. Max. Number of Device Connections for a Loop: 254

### 4W-B Multi-spectral Photoelectric Smoke Detector (Relay) (DHI-HY-2301-RE)

1. Adjustable sensitivity from high or low
2. Multi-spectral technology for better effect
3. Optional dry contact signal with selectable NO/NC
4. Certified to EN54-5
5. Max. Number of Device Connections for a Loop: 76

### 4W-B Heat Detector (A2R) (Relay) (DHI-HY-2311-RE)

1. Fixed temperature detection threshold: 62°C
2. Class A2 rate-of-rise detection: K-linear response
3. Optional dry contact signal with selectable NO/NC
4. Certified to EN54-7 (applying)
5. Max. Number of Device Connections for a Loop: 66

### 4W-B NG&LPG Detector (Relay) (DHI-HY-AA340R)

1. Optional dry contact signal with selectable NO/NC
2. Optional gas type with selectable Natural Gas/LPG
3. Non-loosening screws on base terminal for easy installation
4. Contacts material is highly acid-resistant and rust-resistant
5. Detection range of 0% to 100% LEL, Alarm threshold: 8% ± 3% LEL
6. Certified to CE (applying)
7. Max. Number of Device Connections for a Loop: 14

### 4W-B CO Detector (Relay) (DHI-HY-AF640R)

1. Optional dry contact signal with selectable NO/NC
2. Non-loosening screws on base terminal for easy installation
3. Contacts material is highly acid-resistant and rust-resistant
4. Detection range: 0-1000 ppm CO
5. Certified to CE (applying)
6. Max. Number of Device Connections for a Loop: 100

### Explosion-proof Multi-spectral Photoelectric Smoke Detector (DHI-HY-A0120E)

1. Adjustable sensitivity from high or low
2. Multi-spectral technology for better effect
3. Explosion-proof Rating: Exd ib IIC T6 Gb
4. Certified to CE (applying)
5. Max. Number of Device Connections for a Loop: 254

### Explosion-proof Heat Detector (DHI-HY-A0220E)

1. Fixed temperature detection threshold: 62°C
2. Class A2 rate-of-rise detection: K-linear response
3. Explosion-proof Rating: Exd ib IIC T6 Gb
4. Certified to CE (applying)
5. Max. Number of Device Connections for a Loop: 254

### Explosion-proof Sounder Strobe (DHI-HY-A0520E)

1. Alarm Method: Light alarm and sound alarm
2. Alarm Volume: 75 dB–115 dB @ 3 m (A)
3. Flash Rate: 1.5 Hz-2 Hz
4. Explosion-proof Rating: Exd ib IIC T6 Gb
5. Protection Level: IP66
6. Certified to CE (applying)
7. Max. Number of Device Connections for a Loop: 71

### Explosion-proof Manual Call Point (DHI-HY-A0320E)

1. Push-type manual alarm button
2. Explosion-proof Rating: Exd ib IIC T6 Gb
3. Protection Level: IP67
4. Certified to CE (applying)
5. Max. Number of Device Connections for a Loop: 254

### Sounder Strobe (Ceiling-mounted) (DHI-HY-1502)

1. Alarm Method: Light alarm and sound alarm
2. Alarm Volume: 75 dB–80 dB @ 3 m (A)
3. White color, ceiling-mounted
4. Certified to EN54-3 & EN54-23 (applying)
5. Max. Number of Device Connections for a Loop: 29

### Sounder Strobe Base (DHI-HY-SSDZ)

1. Alarm Method: Light alarm and sound alarm
2. Alarm Volume: ≥60 dB @ 3 m (A)
3. Illumination: 58 lux
4. Compatible with 4-wire detectors
5. Certified to EN54-3 & EN54-23 (applying)
6. Max. Number of Device Connections for a Loop: 26

### Manual Call Point (with Cover) (DHI-HY-A0321)

1. Push-type manual alarm button with cover to prevent accidental touch
2. Independent output: A pair of normally open contacts
3. Certified to EN54-11 (applying)
4. Max. Number of Device Connections for a Loop: 254

### Manual Call Point (DHI-HY-1200)

1. Push-type manual alarm button
2. Independent output: A pair of normally open contacts

3. Independent telephone line terminals
4. Certified to EN54-11
5. Max. Number of Device Connections for a Loop: 254

### Sounder Strobe (Wall-mounted) (DHI-HY-1500)

1. Alarm Method: Light alarm and sound alarm
2. Alarm Volume: 75 dB–115 dB @ 3 m (A)
3. Flash Rate: 1.5Hz–2.0Hz
4. Red color, wall-mounted
5. Certified to EN54-11
6. Max. Number of Device Connections for a Loop: 71

### Repeater Panel (DHI-HY-1330)

1. Repeat the real-time and historical fire events by 64×128 LCD screen
2. Display capacity is up to 999 pieces of alarm event information
3. Built-in sounder with 65dB–115dB (A) @ 1m alarm volume
4. Certified to EN54-2
5. Max. Number of Device Connections for a Loop: 50

### Input Module (DHI-HY-1400)

1. Input module with one relay input signal from NO/NC
2. Support customized alarm linkage by linkage formula
3. Support offline checking for third-party devices by EOL resistor
4. Certified to EN54-18
5. Max. Number of Device Connections for a Loop: 254

### I/O Module (Passive Signal) (DHI-HY-1410)

1. Input/Output module with one feedback relay input and one relay output from NO/NC
2. Support customized alarm linkage by linkage formula
3. Support offline checking for third-party devices by EOL resistor
4. Certified to EN54-18
5. Max. Number of Device Connections for a Loop: 76

### I/O Module (Pulse Signal) (DHI-HY-1410C)

1. Input/Output module with one feedback relay input and one 24V/2A/25ms pulse signal output
2. Support customized alarm linkage by linkage formula
3. Support offline checking for third-party devices by EOL resistor
4. Certified to CE
5. Max. Number of Device Connections for a Loop: 19

### I/O Module (Pulse Signal) (DHI-HY-1410E)

1. Input/Output module with one feedback relay input and one DC24V Active level output
2. Support customized alarm linkage by linkage formula
3. Support offline checking for third-party devices by EOL resistor
4. Certified to CE
5. Max. Number of Device Connections for a Loop: 11

### Isolator Module (Class B) (DHI-HY-1431)

1. Protect the sensors in the loop from short circuit
2. Compatible with DHI-HY-1022/ DHI-HY-1025
3. Certified to EN54-17

### Isolator Module (Class A&B) (DHI-HY-1431R)

1. Protect the sensors in the loop from short circuit
2. Compatible with DHI-HY-1022/ DHI-HY-1025/ DHI-HY-1022R/ DHI-HY-1025R
3. Certified to EN54-17

### Switch Module (Class B) (DHI-HY-1450)

1. Realize Class A topology in DHI-HY-1022/ DHI-HY-1025 (Class B as default)
2. Compatible with DHI-HY-1022/ DHI-HY-1025
3. Certified to CE

### Zone Module (DHI-HY-1460)

1. Realize to access conventional sensors into addressable system
2. Compatible with third-party conventional sensors
3. Certified to CE
4. Max. Number of Device Connections for a Loop: 50

### Repeater Module (DHI-HY-1462)

1. Extend the communication distance of loop up to Max. 3000m
2. Support both topology-series and topology-parallel
3. Certified to CE

### Wireless System (DHI-WG-1037)

1. Realize wired&wireless hybrid solution in addressable system
2. Access the wireless sensors into addressable system
3. RF Frequency: 470 MHz-510 MHz
4. System capacity: Up to 32 wireless sensors for each gateway
5. Communication Distance: Free space: a maximum of 1500 metres, ordinary walls: 3-5
6. Certified to CE
7. Max. Number of Device Connections for a Panel: 19

### Wireless System (DHI-HY-L131)

1. Wireless multi-spectral photoelectric smoke detector including built-in sounder with Over 80 dB (A) at 3 m (9.84 ft) alarm volume
2. RF frequency: 470 MHz-510 MHz
3. Battery Life: About 3 years
4. Communication distance: Free space: a maximum of 1500 metres, ordinary walls: 3-5
5. Certified to CE
6. Max. Number of Device Connections for a Panel: 512

### Wireless System (DHI-HY-L132)

1. Wireless heat detector including built-in sounder with 45 dB-75 dB (A) at 3 m (9.84 ft)
2. RF frequency: 470 MHz-510 MHz
3. Battery Life: About 5 years
4. Communication distance: Free space: a maximum of 1500 metres, ordinary walls: 3-5
5. Certified to CE
6. Max. Number of Device Connections for a Panel: 512

### Wireless System (DHI-HY-L121)

1. Wireless push-type manual alarm button
2. RF frequency: 470 MHz-510 MHz
3. Battery Life: About 5 years
4. Communication distance: Free space: a maximum of 1500 metres, ordinary walls: 3-5
5. Certified to CE
6. Max. Number of Device Connections for a Panel: 512

### Wireless System (DHI-HY-L151)

1. Wireless sounder strobe
2. Light alarm and sound alarm
3. Alarm Volume: 75 dB-115 dB (A) at 3 m (9.84 ft)
4. RF frequency: 470 MHz-510 MHz
5. Battery Life: standby for 1 year, alarm continuously for 12 hours

6. Communication distance: Free space: a maximum of 1500 metres, ordinary walls: 3-5
7. Certified to CE
8. Max. Number of Device Connections for a Panel: 512

### Linear Beam Detector (DH-YJ104)

1. Calibration Method: Manual calibration
2. Optical path length: 10 m-100 m
3. Max. Optical Path Direction Deviation:  $\pm 0.5^\circ$
4. Communication Method: Relay
5. Certified to CE

### Linear Beam Detector (DHI-HY-BD1)

1. Calibration Method: Automatic or manual calibration
2. Optical path length: 10 m-100 m
3. Max. Optical Path Direction Deviation:  $\pm 0.5^\circ$
4. Alert Events: Fire alarm and obstruction alarm
5. Communication Method: Dahua addressable protocol or relay
6. Certified to CE
7. Max. Number of Device Connections for a Loop: 200

### Graphical Fire Management System (CRT) (DHI-HY-1101)

1. Full site map navigation to remotely monitor alarm systems, support third-party panels to integrate
2. 18.5" TFT-LCD, 1366×768, 250 cd/m<sup>2</sup>
3. History Logs Capacity: Max.10000 for a single event
4. Build-in speak, 2\*10/100/1000 adaptive Ethernet ports, 1\*HDMI, 2\*USB3.0, 2\*USB2.0 Type A, 2\*RS485, 2\*RS232, 2\*CAN
5. Certified to CE (applying)

### Encoder (DHI-HY-BM-1712)

1. DHI-HY-BM-1712 is designed to read/write logic address of sensors, helping to deploy the addressable system conveniently
2. Automatically address +1 when addressing devices consecutively
3. LCD display: Intuitive and user-friendly screen to write/read address
4. Manually calibration for linear beam detector DHI-HY-BD1
5. Certified to CE

### Telephone&Broadcast System

1. The system includes fire telephone panel DHI-HY-1901, fixed fire telephone handset DHI-HY-1910, bus-type fire telephone jack DHI-HY-1930, fire telephone mobile handset DHI-HY-1920, multi-line fire telephone jack DHI-HY-1931, fire emergency evacuation broadcast panel DHI-HY-1801, surface-mounted ceiling speaker DHI-HY-1820, ceiling-mounted speaker DHI-HY-1821, wall-mounted speaker DHI-HY-1822, fire telephone & emergency evacuation broadcast panel integrated panel DHI-HY-1802
2. Certified to CE (applying)

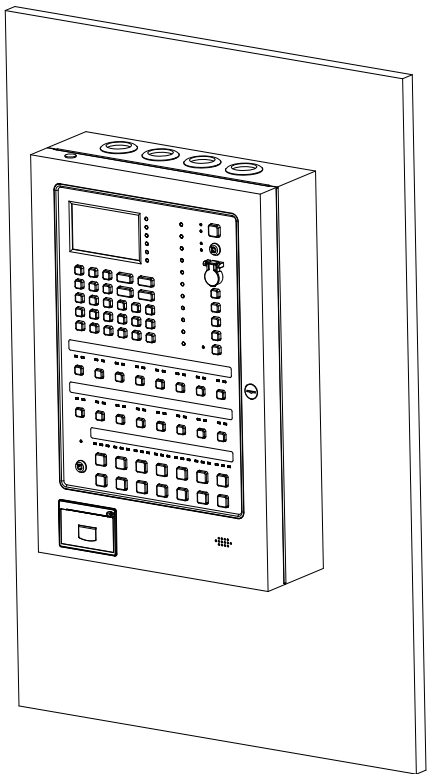
### Water-proof Box for Sounder Strobe (DH-HSG01)

1. Material of Enclosure: ABS
2. Protection Level: IP65

### Water-proof Box for Manual Call Point and Modules (DH-HAN01)

1. Material of Enclosure: ABS
2. Protection Level: IP65

Installation



Ordering Information

| Model       | Part Number     | Description                                                                              |
|-------------|-----------------|------------------------------------------------------------------------------------------|
| DHI-HY-1022 | 1.0.01.36.15017 | Addressable Fire Alarm Control Panel with 1 loop (with printer) (without simulated zone) |
| DHI-HY-1022 | 1.0.01.36.15553 | Control Panel with 1 loop (without printer) (with simulated zone)                        |
| DHI-HY-1025 | 1.0.01.36.15280 | Addressable Fire Alarm Control Panel with 2 loop (with printer) (without simulated zone) |
| DHI-HY-1025 | 1.0.01.36.15537 | Addressable Fire Alarm Control Panel with 2 loop (without printer) (with simulated zone) |

Dimensions (mm/inch)

