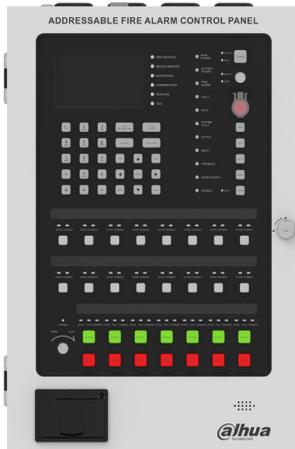


DHI-HY-1022/DHI-HY-1025

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.

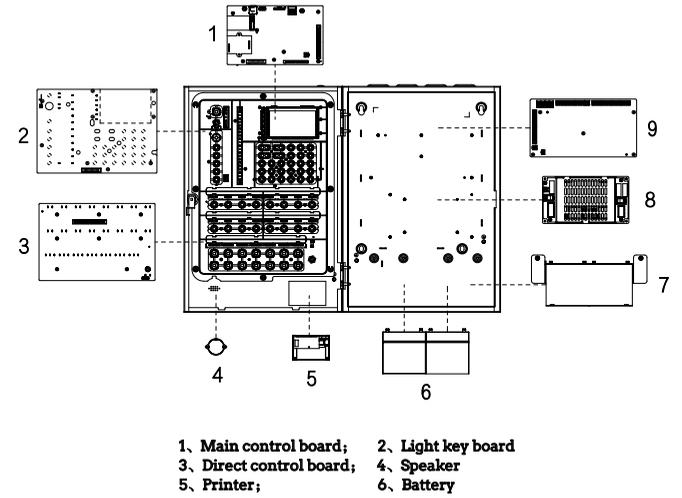
Technical Specification

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 Zone Number: 0, 8 or 16 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

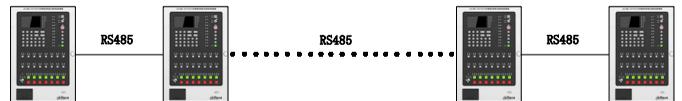
Loop Number	1 loop for DHI-HY-1022(R) 2 loops for DHI-HY-1025(R)
Topology Mode	Class A for DHI-HY-1022R and DHI-HY-1025R Class B for DHI-HY-1022 and DHI-HY-1025
Loop Capability	Max. 254 sensors and modules for each loop
Optional Built-in Micro Thermal Printer	Option 1: With printer by default Option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

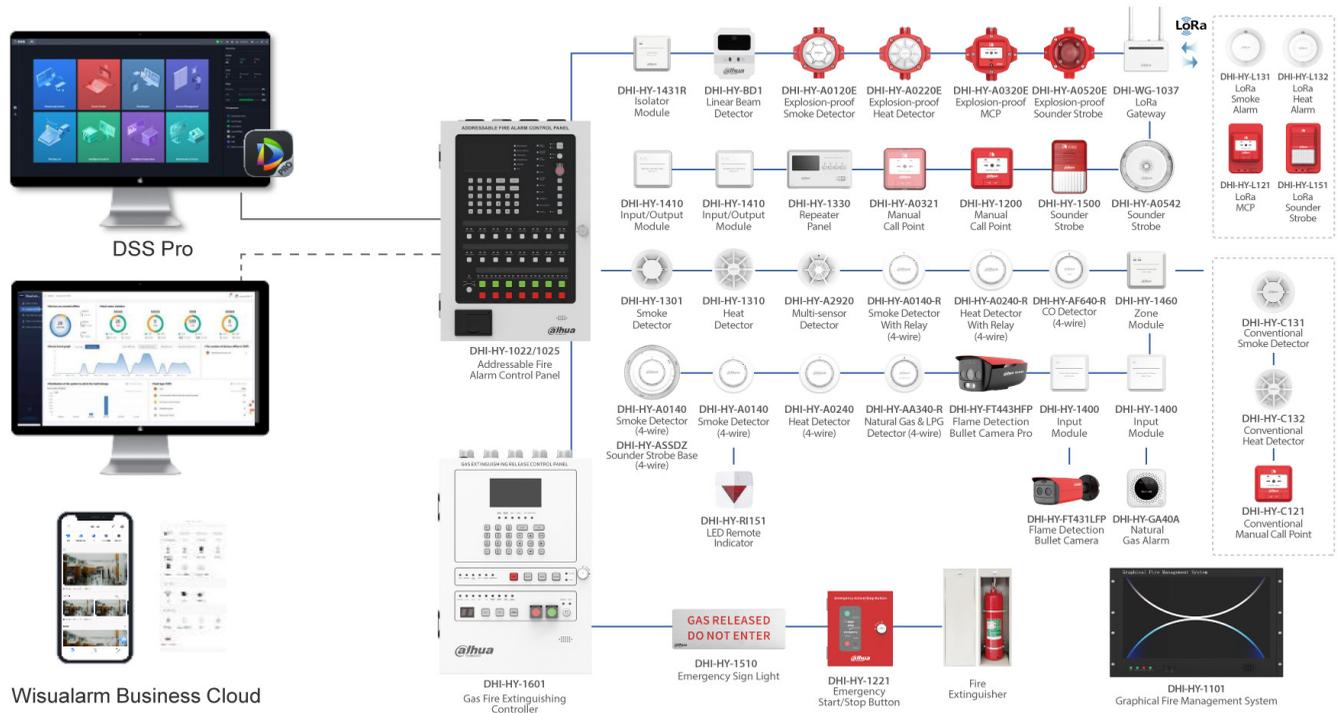
Panel Overview



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 Multi-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, 1366x768, 250 cd/m²
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)

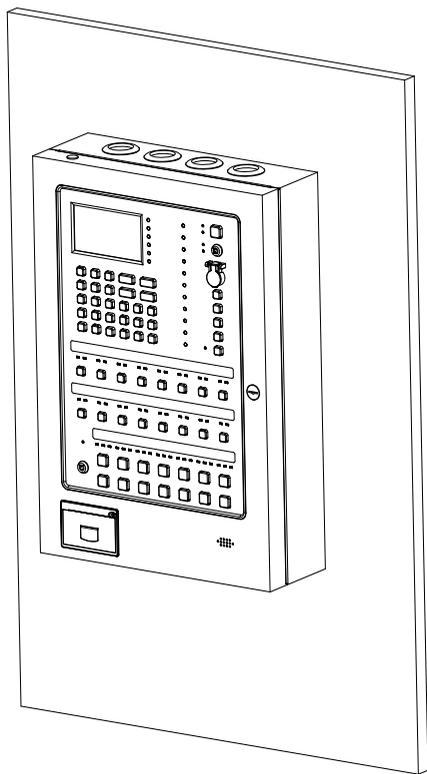
Water-proof Box for Sounder Strobe (DH-HSG01)

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)

