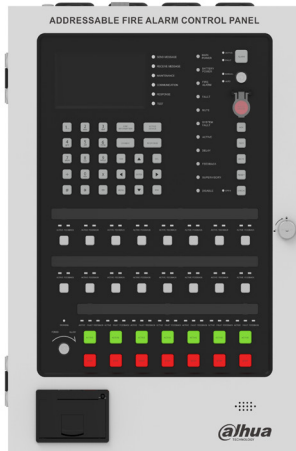


DHI-HY-1022R/DHI-HY-1025R

Addressable fire alarm control panel with optional printer



- Class A Topology: Reduce wiring costs and enhance circuit stability.
- Two-Wire, Polarity-Free Communication: The system uses a two-wire, polarity-free technology, eliminating the need for an external power source. This enhances reliability, simplifies wiring, reduces costs, and facilitates maintenance.
- User-Friendly Display: The 4.3-inch LCD screen (480 × 272) offers an intuitive interface for complete system setup without external tools.
- Extended Event Logging: Historical events are securely saved and can be queried and printed by time and type.
- Intelligent Power Management: Automatic switching between main and backup power ensures a stable supply, enhancing system reliability.
- Comprehensive Protection: Includes short circuit, open circuit, and overcurrent protection for stable operation.

System Overview

The DHI-HY-102XR series addressable control panel features advanced digital addressing technology and supports IoT solutions. It is compatible with the Dahua DSS Pro and Wisualarm Cloud platforms. The panel allows for mixed wired and wireless connections, enabling the use of LoRa wireless detectors via a gateway. Additionally, it supports a hybrid configuration of addressable and non-addressable devices through zoned modules.

Scene

It is suitable for residential and industrial buildings such as hotels, shopping malls, hospitals, office buildings, schools, banks, libraries, factories, and warehouses.

Functions

Flexible Solution

Supports flexible selection for IoT solutions, wired/wireless hybrid solution, and addressable/conventional hybrid solution.

Quick and Accurate Fire Alarm

Report events in under 1 second with precise address.

Low Consumption

Ultra-low consumption, low-carbon, and eco-friendly.

Technical Specification

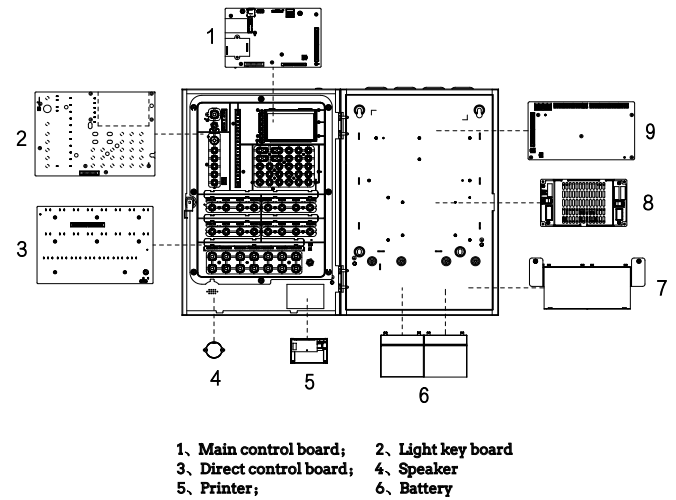
Control Panel Specification

Working Voltage	16V DC–28V DC
System Capacity	Max. 254 devices for one loop
Main Power	AC90-240V/50Hz, 60Hz
Backup Power	2×12V/5Ah lead-acid battery
Fire Alarm Terminal	NO/NC
Fire Fault Terminal	NO/NC
Communication Distance	Max. 1500m
Max Cascade	128 Panels By RS-485
Cable Specs	2×1.5 mm ²
Display	480 × 272 4.3" LCD screen
Printer (optional)	Micro thermal printer
Dimensions	333.0 mm×115.0 mm×480.0 mm (13.11" × 4.53" × 18.90")
Operating Temperature	–10°C to +40°C (+14°F to +104°F)
Operating Humidity	≤ 95% RH (no condensation)
Protection Grade	IP30
Weight	7 kg 10 kg (with 2 batteries)
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
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

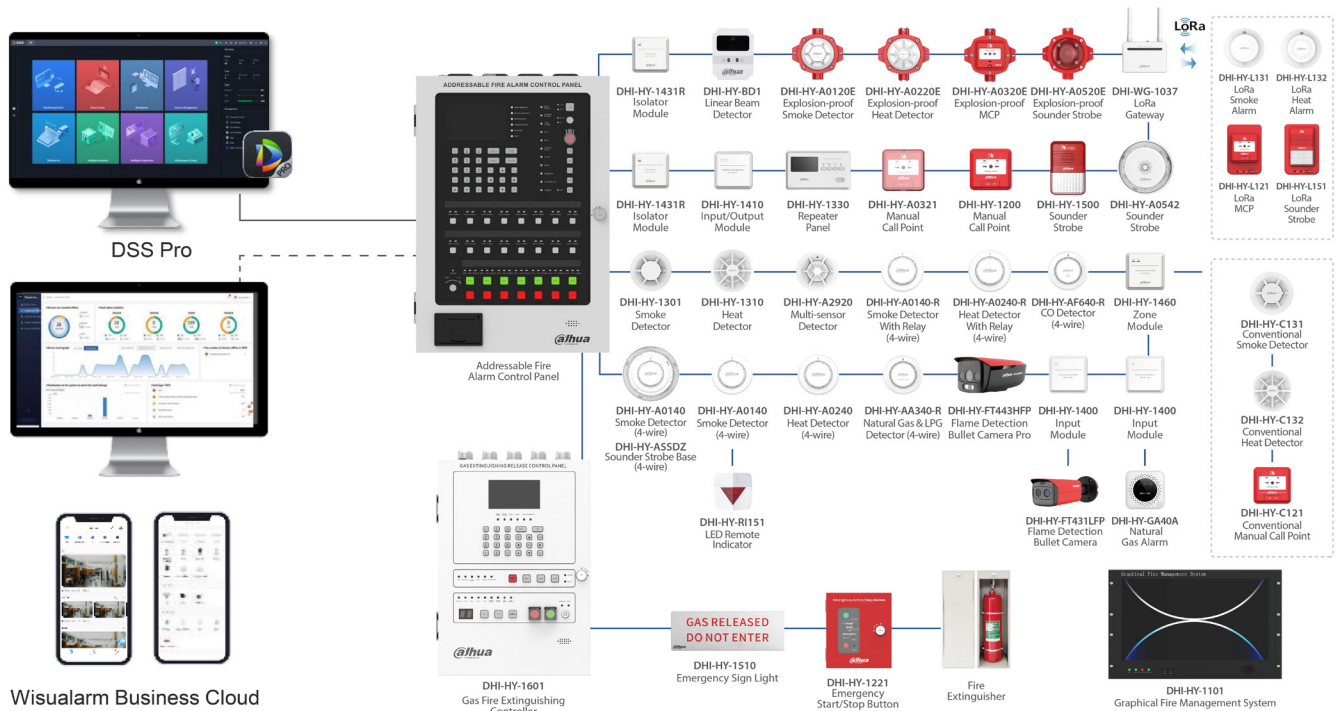
Panel Overview



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 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
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
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: $8\% \pm 3\%$ 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: Automatical 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/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)

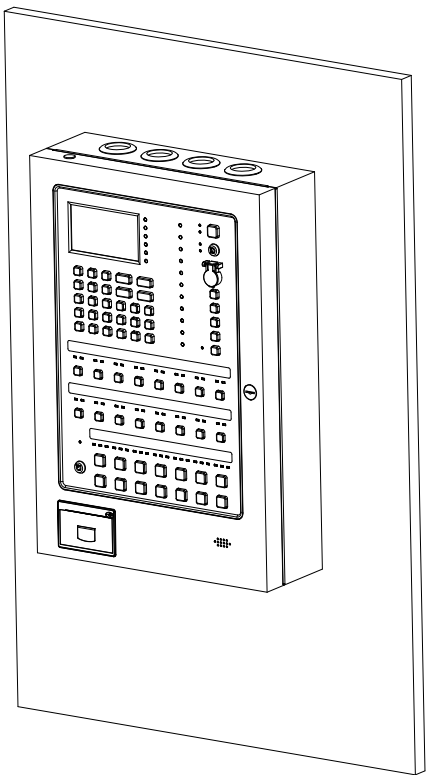
Water-proof Box for Sounder Strobe (DH-HSG01)

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-1022R	1.0.01.36.16632	1 Loop Addressable FACP with Printer
DHI-HY-1025R	1.0.01.36.16633	2 Loops Addressable FACP with Printer
DHI-HY-1022R	1.0.01.36.16634	1 Loop Addressable FACP without Printer
DHI-HY-1025R	1.0.01.36.16635	2 Loops Addressable FACP without Printer

Dimensions (mm/inch)

