

# ADDRESSABLE FIRE ALARM CONTROL PANEL

## FEATURES

- English LCD Screen (240 x 128 or 240 character).
- LCD backlight energy-saving protection function.
- Two-wire circuits for supper long transmission distance (up to 1,5 km between the control panel and modules).
- The data memory device can store up to 2000 historical records permanently (the device in graphic system can be expandable up to 20 million records).
- Composed voice alarm function (broadcast) in human voice to operators).
- Voice guidance function (while operating)
- Abnormal temperature protection function (I/O modules over loading).
- 5LCs, IDCs are equipped with insulation for false inspection function.
- Protection against lightning surge.
- I/O modules miswiring protection to accessories are available.
- I/O modules are equipped with segment isolation function.
- A table to review all I/O modules statuses is available for casier operation.
- Addresses and interlocks can be display on the LCD screen.
- Weekly automatic check function.
- Repeat alarm function.
- Two stage alarm delay function
- Standby battery with power saving function
- Build in-printer



HOOSEKI Fire Alarm Control Panel



HOOSEKI Fire Alarm Annunciator

## DIMENSIONS (STEEL) \*Size mark in red represent with printer option.

Cabinet	Wall-mount						
Addresses /Loops	256/1L	768/3L	1024/4L	1208/5L	1536/6L	1792/7L	2048/1L
H(mm)	450	500	840	1020			
W(mm)	480	480	480	480			
D(mm)	130 (*160)	160	180	180			

## SPECIFICATIONS

ITEM	Specifications
Model	HS-ADD-1P/8L(1Loop/8Loop), HS-ADD-AN1/8 (1 Loop/8 Loop)
Power Source	110V AC 50/60 Hz or 220V AC 50/60 Hz
Addresses / Loops	128/1L 256/1L 512/2L 768/3L 1024/4L 1280/5L 1536/6L 1792/7L 2048/8L
Standby Battery	24V DC
Transmission Distance	Two-wires (able for branch wiring 1,5km)
Annunciator Connection	Use RS-485 for 800m, Network Signal Transceiver for 3km and Optical Fiber for up to 40km
Loop Voltage	Load Power / Indicating Lamp / Zone Telephone : 24V DC SLC power source: 32V AC
Power Consumption	Main control panel (monitoring) : 500mA Communication module for each system (monitoring): 280 mA
Transmission Method	Selective and sequential (I/O modules)
Broadcast Output Method	Relay output : interlock relay board x 13 sets for a max of 2,000 contacts (relay board = 40 contacts [standard], 160 contacts [expansion])
Main Audio	Voice notifications, human voice or voice alarm (over 90 dB)
Ambient Temperature	0~40°C
Cabinet Material	Powder coating steel (optional Flame retardant ABS enclosure available up to 256/1L only)

# CONVENTIONAL FIRE ALARM CONTROL PANEL

## FEATURES

- **Two-Stage alarm delay function :**  
At the first stage, when the detector sends the signal for the first time, the control panel will automatically reset the signal and enter the second stage for standby after 8 seconds.  
At the second stage, if there is another signal sent by the detectors within 9-40 seconds, the control panel will triggered the fire alarm, else reset the alarm signal. This will prevent the control panel from sending false alarms.
- **Standby battery protection :**  
During power-cut, when the standby battery is under DC 18V it will automatically stop discharging to extend battery life.
- **Protection against lightning surge :**  
Power supply module with protection against lightning surge to avoid device damage caused by high voltage or power surge.
- **Quality control :**  
All interior components of the display module and base boards in the unit are approved by CE and CNS. All products have to pass strict inspection before delivery to ensure durability.
- **Abnormal voltage inspection :**  
With abnormal voltage display function, the system can indicate high and low voltage.
- **Modular design :**  
The system has modular design with inputs/ outputs independent terminal module. If there is a problem on site, users do not have to remove external wires and can easily replace defective boards improving the efficiency of maintenance and inspection.
- **Exterior design :**  
Equipped with zone display panel board. The panel (made of flame retardant plastic) adopt a streamline design for clear indication of zone's name, floor, building, properties, etc.
- **Other Functions:**  
Can be integrated with the TYY Voice Evacuation System and the Emergency Telephone System in one cabinet for more appealing look and less space consuming.



HOOSEKI Fire Alarm Control Panel

## DIMENSIONS (STEEL)

Cabinet	Wall-mount												
Number of Loops	5~10L	15L	20L	25~30L	35~40L	45~50L	55~60L	65~70L	75~80L	85~90L	95~100L	105~110L	115~120L
H(mm)	400	495	580	520	580	700	760	840	930	1020	1110	1195	1350
W(mm)	300	300	300	480	480	480	480	480	480	580	580	580	580
D(mm)	120	120	120	180	180	180	180	200	200	200	200	200	200

Cabinet	Floor-standing			2-in-1			3-in-1	4-in-1	Interlock Control Panel	
Number of Loops	125~130L	135~150L	155~170L	135~260L	265~300L	305~340L	345~450L	455~600L	1L	1L
H(mm)	1600	1800	2000	1600	1800	2000	1800	1800	180	250
W(mm)	580	580	580	1160	1160	1160	1740	2320	180	210
D(mm)	260/360	260/360	260/360	260/360	260/360	260/360	260/360	260/360	75	90

## SPECIFICATIONS

ITEM	Specifications
Model	HS-5L, 10L, 15L, 20L, HS-25L, 30L, 40L, 50L (5 Zone - 40 Zone) AN-5L, 10L, 15L, 20L, 25L, 30L, 40L, 50L (5 Zone - 50 Zone)
Power Source	110V AC 50/60 Hz or 220V AC 50/60 Hz
Standby Battery	24V DC
Charging Voltage	Below 26V DC 450mA, trickle charging
Circuit Voltage	24V DC operation voltage, under 10~11V DC 32mA
Rated Impedance	Under 50 Ω, Ground Resistance above 2M
Detector Connection	No limitation for Conventional Rate of Rise Heat / Fixed Temperature Heat Detectors : Up to 30 Photoelectric Smoke Detectors (24V DC 40 A) per zone
E.O.L Resistor	10K Ω
No. of Indicators	1.2 times of the number of zone (LED indicating lamp)
No. of Bells	1.2 times of the number of zone
Color	Green/ Red / Black
Buttons	Rocker Switch / Push-button / Capacitive Touch Switch
Cabinet Material	Powder coating steel (optional Flame retardant ABS enclosure available up to 20L only)
Main Audio	Mono tone sounder (above 85dB for 1m distance)
Alarm Relay Contact	2 sets of No-Voltage NO contact, capacity AC 250V / 7A



HOOSEKI Fire Alarm Annunciator





## FIRE ALARM SYSTEM

### Rate of Rise Heat Detector



HS-WL19L

ISO 9001 certificated CE

### DESCRIPTION

The rate-of-rise heat detector, HS-WL19L, is designed to sense the rapid or abnormal rise in temperature of air. If ambient temperature rises rapidly, the air in chamber expands and presses the diaphragm to close the contact point to give advanced warning. When a slower temperature change occurs, the expanded air escapes through a bleeding hole to keep the pressure balanced so that the fault alarm never occurs.

### ADVANTAGES

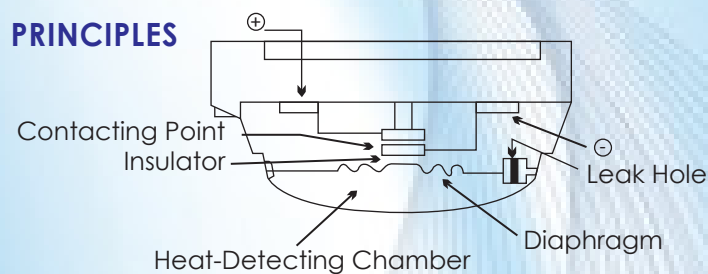
- Rate-of-rise heat detector detects intense fires by quickly responding to rapid temperature increases.
- Mechanical operating principles ensure the long-term durability and the least malfunction.
- Self-restoring ensures those elements repeated use.
- High quality components are fitted for greater reliability.
- Red indication lamp lights when detector is activated.
- High-temperature-enduring plastics and fire-proof material are used to build up the main body of the detector.
- The base is in common with other detectors made in this company for the facilitation of installation.
- Connections are non-polarized to avoid wiring mistakes.

### SPECIFICATION

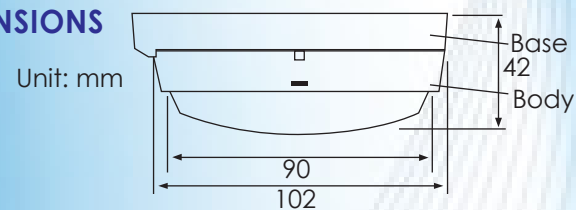
Model	HS-WL19L
Type	2 wire
Voltage Range	12~30V DC
Alarm Current	24V DC 30mA
Contact Rating	N/A
Polarization	Non-polarized
Alarm Temp.	Comply to EN54, CNS

Ambient Temp.	-10°C~+55°C
Ambient Humidity	0~95%
Material	Fire-proff Plastics
Dimensions	102 (Dia.) x 42 (H)mm
Weight	130g
Color	White

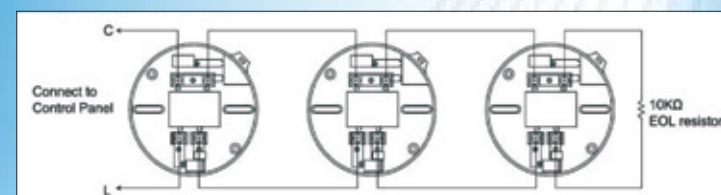
### OPERATION PRINCIPLES



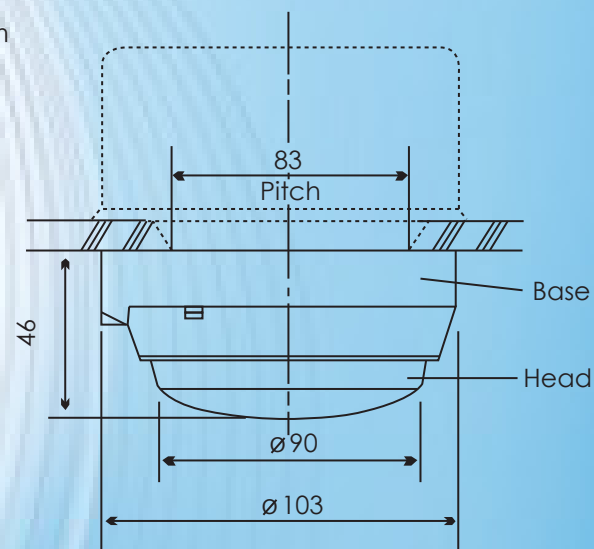
### DIMENSIONS



### WIRING AND CONNECTION



### MOUNTING STATUS



## FIRE ALARM SYSTEM

### Fixed Temperature Heat Detector



HS-WK100L

ISO 9001 certificated CE

### DESCRIPTION

The detector, HS-WK100L incorporates a self-resetting bimetallic disk element with response indicator. It activates whenever the ambient air temperature reaches the top temperature detector setting.

### ADVANTAGES

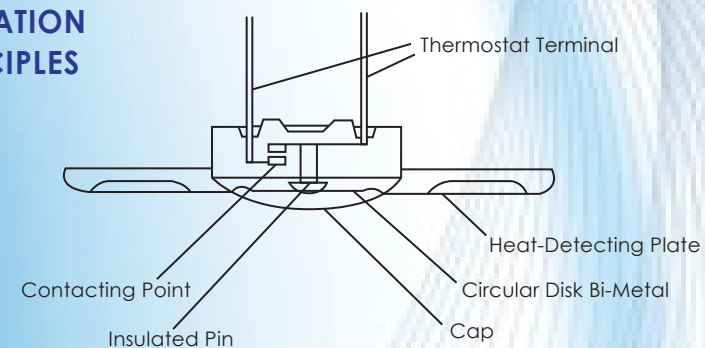
- Stabilized performance, long-term durability and least-malfunction are ensured by employing a bimetal mechanism.
- Self-restoring ensures the elements repeated use.
- The sensitive part is enclosed to prevent from being moistened and contaminated.
- Pure silver contacts ensure the quick response.
- Red indication lamp lights when detector is activated.
- High-temperature-enduring plastics are used to build up the main body which is also nicely shaped.
- The base is in common with other detectors made in this company for the facilitation of installation.
- Connections are non-polarized to avoid wiring mistakes.

### SPECIFICATION

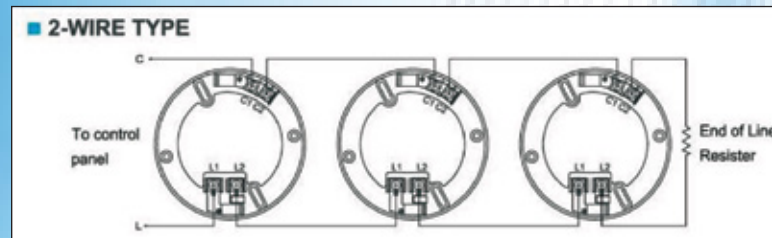
Main Model	HS-WK100L
Type	2 wire
Voltage Range	12~30V DC
Alarm Current	24V DC 30mA
Polarization	Non-polarized
Fixed Temperature	60°C, 70°C, 80°C.
Sensitivity :	When exposed within an air stream 1 m/sec., 125% higher than its operating temperature, and at 20 C of ambient temperature, the detector will sound an alarm within 90 seconds.

Alarm Temperature	Comply to EN54, CNS
Ambient Temperature	-10°C~+55°C
Ambient Humidity	0~95%
Material	Fire-Proof plastics
Dimensions	101 (Dia.) x 47 (H)mm
Weight	100gms.
Color	White

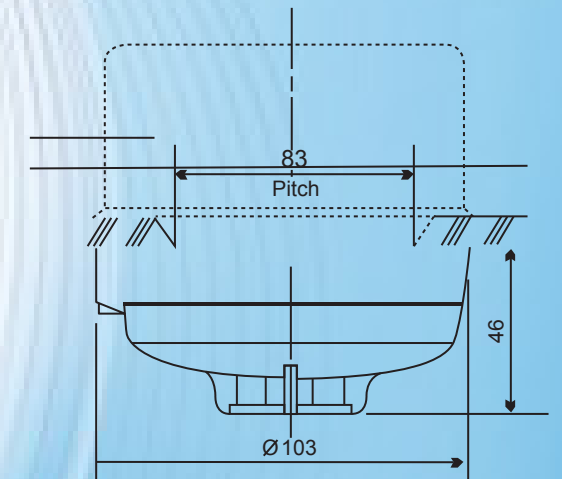
### OPERATION PRINCIPLES



### WIRING AND CONNECTION



### MOUNTING STATUS







# FIRE ALARM SYSTEM

## Photoelectric Type Smoke Detector HS-136



HS-136

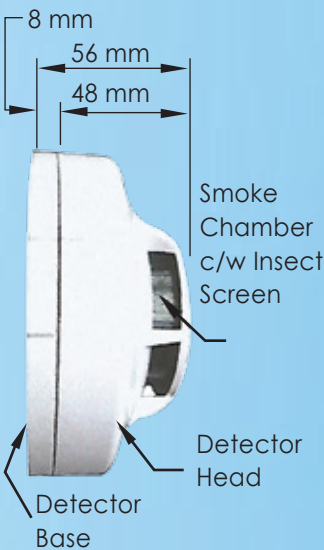
### ISO 9001, CE Approved Smoke Detector Model HS-136

Detector Status LED Indicator :-  
Normal Status : Green (Bli  
Alarm Status : Red



### SPECIFICATIONS

Technical Specifications	Smoke Detectors
Normal Rated Voltage	24VDC
Operating Voltage	9.6 VDC to 30 VDC
Quiescent Current	< 65uA
Alarm Current	18 to 22mA (Typical 20mA)
Remote LED Drive Current Output	Max. 20mA
Maximum Air Velocity	7.6 m/s
Weight	102g (160g with Base DB-6)
Operating Temp. Range	-10°C to +50°C
Relative Humidity	95%RH, Non Condensing @40 C
Alarm LED Indication	Red (Continuous)
Normal LED Indication	Green (Blinking)
Ingress Protection	IP42
Material of Body	ABS Plastic (To UL94V-0 Flammability Test Standards)
Colour of Body	White
Standards	In Compliance to EN54 Part 7



### MOUNTING AND WIRING TERMINATION

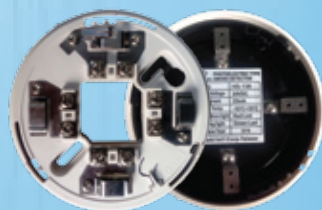
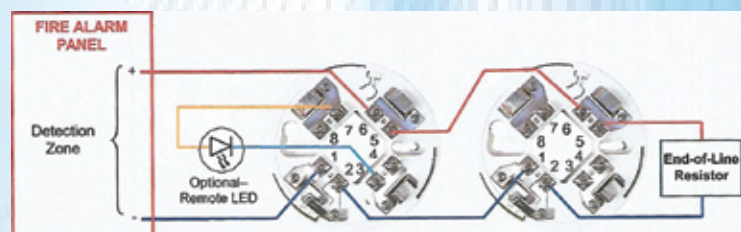
Caution : Before installing the detector, disconnect the power supply and check the integrity of the wiring. Verity that all the detector bases are securely installed and that the wiring are property marked or coloured. Secure the detector base onto the the conduit boxes using the mounting holes provided.

Terminate the detector wiring as shown below :-

Terminal 1 :-Zone 'In' (Interrupted for fault detection upon removal of detector head)	Terminal 3 :- Remote LED 'Out-' (Cathode)
Terminal 2 :-Zone 'Out' (Interrupted for fault detection upon removal of detector head)	Terminal 4 :- Remote LED 'Out-' (Cathode)
	Terminal 5 :- Zone 'In'
	Terminal 6 :- Zone 'Out'
	Terminal 7 :- Remote LED 'Out+' (Anode)
	Terminal 8 :- Remote LED 'Out+' (Anode)

### Typical Detector Termination Diagram

Recommended Wiring :  
Colour Coded PVC Cable, Cross Section of not less than 1.0mm<sup>2</sup>



# FIRE ALARM SYSTEM

## Photoelectric Type Smoke Detector HS-WT30L



HS-WT30L

### ISO 9001, CE Approved

### DESCRIPTION

The photoelectric type smoke detector is based on the photoelectric sensing principle to make up. When fire break out and smoke enters the light-tight box, the particles of smoke scatter the infrared light, and this scattered light goes into the receiving element, thereby emitting an electric current, and while the electric current is up to the fixed extend, the fire alarm will be activated. This is an advance scientific device. It is very quick and accurate to activate the early fire warning system. Because of the pretty and compact styling, it is most suitable for the interior decoration of the modern buildings.

### ADVANTAGES

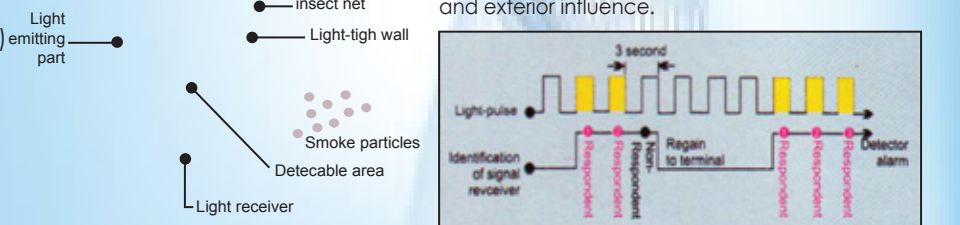
- With the photoelectric sensing principle, this kind of detectors is activated more quickly, accurately and reliably, and there are no false alarm due to chemicals, exhaust gas, wind and exterior light.
- With stainless steel net of holes' diameter 0.5mm preventing from flying insects and dust particles but no barrier to smoke inflow.
- No harm to man and beast as no radiation source is used.
- Because of the compact styling and pretty outlines, it is most suitable for such modern buildings as employed in the design of decorative smooth ceilings.
- The photoelectric type detector ensures repeated use and by removing the cover can accomplished maintenance easily.
- Connection are non-polarized to avoid wiring mistakes.
- Universal base is interchangeable with the various type detectors' base made in this company, reducing storage and installation costs.

### SPECIFICATION

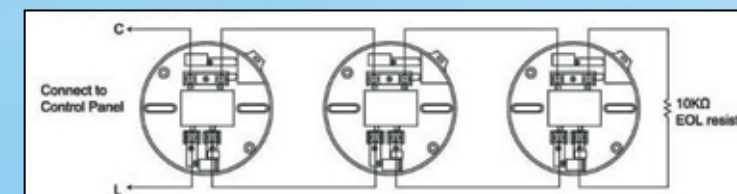
- Main Model: HS-WT30L
- Series Model: HS-WT30L1, HS-WT30L3
- Rated Voltage: 24V DC
- Working Voltage: 12V to 30V DC
- Standby current: 60 micro amps.(max)
- Alarm Current: 100milli amps.(max)
- Initial Stabilizing Time: 15sec
- Identification Light: Red color(LED).
- Ambient Temperature: -10 C~+50 C
- Ambient Humidity: 0-95%
- Body Case: Fire-Proof Plastic
- Weight: Approx.140g.
- Color: Creamy-white.
- Used Conventional

### OPERATION PRINCIPLES

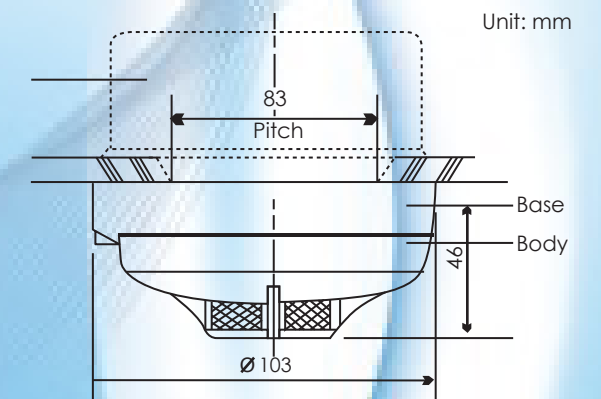
A fire signal is emitted only more than three pulse signals are produced, that is a completely reliable process through thrice confirmations. There are no false alarm due to dust particles, confused pulses and exterior influence.



### WIRING AND CONNECTION



### MOUNTING STATUS







## FIRE ALARM SYSTEM

### Fire Alarm P.B.L Combination Series

#### Base Manual Call Point (HS-Base)



HS-FP1 Manual Call Point

#### DESCRIPTION

This Fire Manual Station can quickly transmit a signal to the fire receiver terminals or the repeaters while the button under a transparent protective cover has been pushed at the first finding of a fire accident. (This signal is beyond the accumulated time limitation).

There is a light over the button. The light will light up as a signal has been exactly received by the receiver terminal. There is also a telephone jack for telephone communication with attendant at the fire receiver terminal.



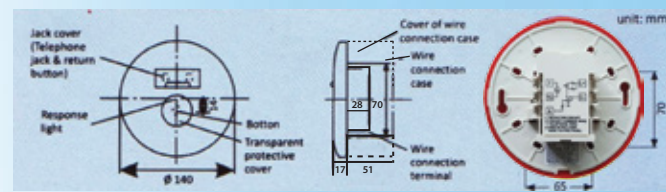
#### SPEKIFIKATIONS

Model No.	HS-FP1
Voltage Range	24V DC
Alarm Current	30 mA
Contact Rating	24V DC 100mA
Sub-Function	Phone jack; Confirmation LED; Reset button
Option	Base
Material	Fire-Proof plastics
Dimensions	Φ 140 (mm)
Weight	150g
Color	Red

#### ADVANTAGES

1. Auto-Return by pushing button, no need to disassemble the main body.
2. Response light available to identify the operation completed.
3. Reinforced transparent protective cover is reusable.
4. All plastics are fire-proof, light, convenient and stylish.
5. Outside cord distribution with terminators to ease on work.

#### MOUNTING



#### HS-FL3 Indicator Lamp LED



#### DESCRIPTION

The fire indicating lamp is an equipment to go twinkling, to show the position of a fire signal device and to be controlled vby fire receiver terminal or a repeater while a fire accident accured.

#### SPEKIFIKATIONS

Model No.	HS-FL3
Power Source	24V DC
Alarm Current	12 mA
Ambient Temp.	-10°C~+55°C
Material	Fire-Proof plastics
Weight	52g
Dimensions	Φ 92 x 58 (H) mm
Color	Red

#### HS-FB6 Alarm Bell FB6 24V

#### DESCRIPTION

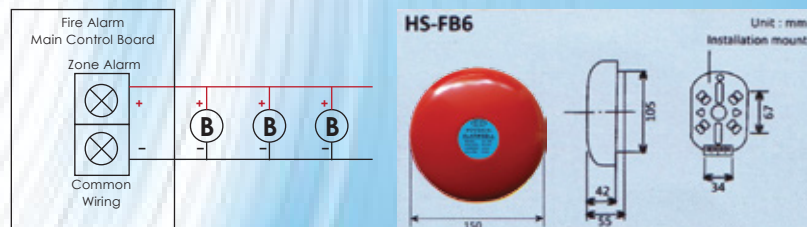
The fire alarm bell is an equipment controlled by the fire receiver terminal or the repeater and sounds a warning as a fire accident occured.

#### ADVANTAGES

1. The way of motor-driven is taken at the low consumption of current, to reduce the load for power output from receiver terminal.
2. This design of exceptional structure is sturdy and durable. The bell even can ring to last 40 hours without decline of the performance and structure.

#### SPEKIFIKATIONS

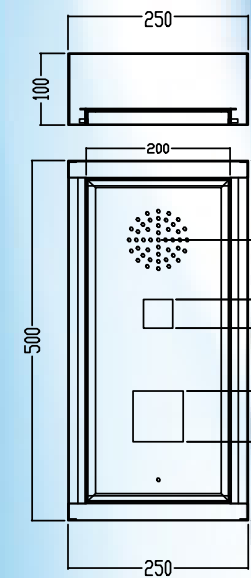
Model No.	HS-FB6
Power Source	24V DC
Alarm Current	35 mA
Movement	Motor
Material	3.0 Alloy Alu
Dimensions	Φ 6" (150mm)
Weight	418g
Sound Output	90 dB/ M and above
Color	Red



## FIRE ALARM SYSTEM

### Fire Alarm Accesories

#### FRONT VIEW SIDE VIEW



#### TOP VIEW

#### DESCRIPTION

- Material Plate MS tebal 1.2 mm
- Engsel SH-006
- Mata ayam
- Knob pintu



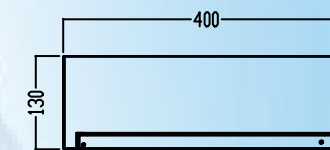
#### Telephone Handset

Material	ABS Plastic
Purpose	Equipped in Fire Hose, insert to manual call point plug for communicating with fire alarm control panel
Dimensions	212 (H) x 63 (W) x 50 (D) mm

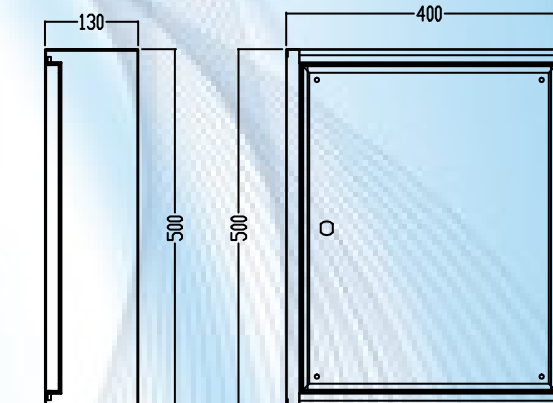
#### BOX Main Distribution Frame (MDF)



#### FRONT VIEW SIDE VIEW



#### TOP VIEW



#### DESCRIPTION

- Material Plate MS tebal 1.2 mm
- Engsel SH-006
- Kunci Hubben
- 50 pairs : 50 x 40 x 13 cm

#### BOX TB (Terminal Box) 12 pairs, 24 pairs

#### DESCRIPTION

- Material Plate MS tebal 1.2 mm
- Engsel SH-006
- Kunci Hubben
- 12 pairs : 30 x 20 x 8 cm
- 24 pairs : 30 x 25 x 8 cm







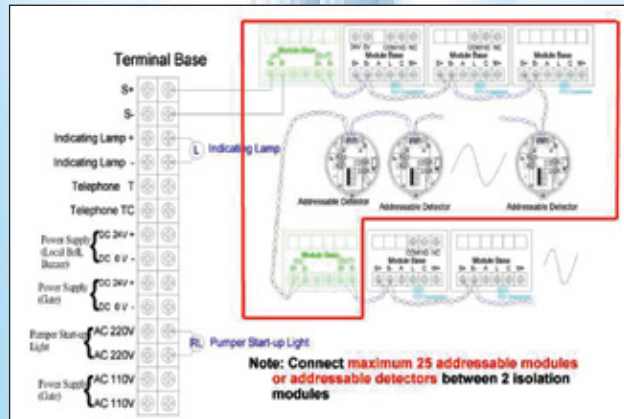
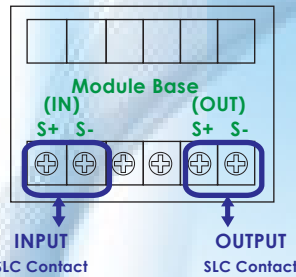
# FIRE ALARM SYSTEM

## I/O Modules

### Isolation Module



HS-ADD-IM



### FUNCTIONS

- Isolation module for addressable 2 wire communication system
- Recommend to use for each 25 addressable equipments
- Isolation short circuit indicating lamp
- Not occupy address
- Deploy at main line for branching purpose
- Isolation module deploys between main line and branch line, when short circuit happens, isolation module will auto-isolate the error part with the main line so can avoid the whole zone break-down
- Alumina rail lock structure, easy to install

### SPEifications

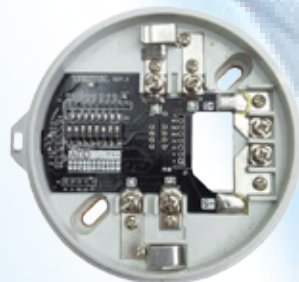
Function	Communication short circuit isolation
Operating Voltage	DC16~36V
Current Consumption	DC32V normal 400μA
Reaction time	Below 0.3 sec
Ambient Temperature	0°C~50°C Relative Humidity below 95%
Dimension	67 x 100 x 26 mm
Material	Fire~proof plastic

### Base Detectors Addressable (Only for Full Addressable System)

#### HS-ADD-BD

Suitable for Model:

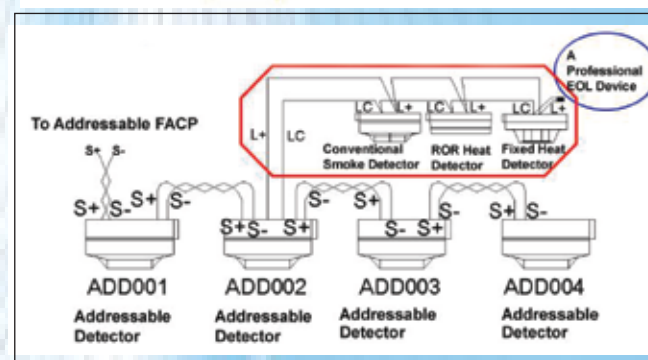
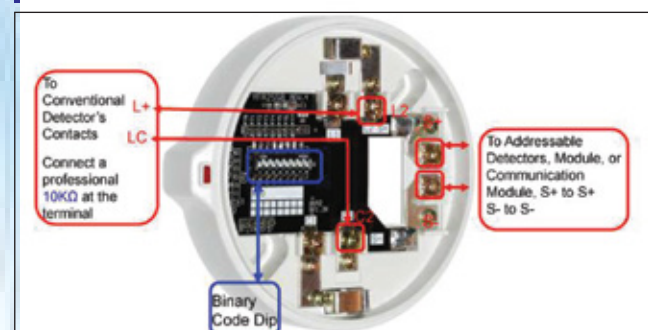
- ROR (HS-WS19L)
- Fixed (HS-WK100L)
- Smoke (HS-WT30L)



### SPEifications

Function	Circuit Input
EOL Resistor	Bellow 10KΩ/master line
Ambient Temperature	-10°C~50°C Relative Humidity below 95%
Monitored Current	420μA/DC24V
Operating Voltage	DC16~30V
Material	Fire-proof plastic
Dimension	108 x 22.6 mm
Note	Addressable professional EOL resistor

### WIRING APPLICATION & INSTRUCTION



### FUNCTIONS

- Status indicators for "Monitoring", "Active," "Error" and "Isolating."
- Address coding by binary coded dip switch for easier setting
- Two-wires multi multi-transmission
- Stable communication with rejection to noise and disturbances
- Self-test functions for circuit disconnection and activation
- Expandable to connect with photoelectric smoke, rate of rise heat and fixed temperature heat detectors , and no need for external power supply

#### Wiring Notes :

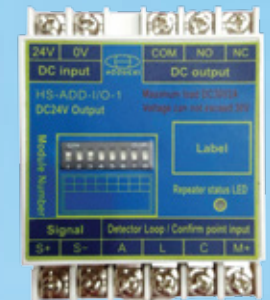
- Addressable Detector Base's L+ LC connect to Conventional Detectors' L+ LC, polarized
- Provided current is not over 1.3mA/DC24V
- A Professional terminal device is needed, cannot use a normal 10KΩ



# FIRE ALARM SYSTEM

## I/O Modules

### Control Modules 1 In 1 Out



HS-ADD-I/O-1

Control Modules 1 In 1 Out (with isolation function)

Communication isolation function, when short circuit occurred in the module, the module will be automatically isolated from the main communication line.

### FEATURES

- Built-in tri-state LED indicator to indicate different statuses, "Monitoring", "Disconnection", and "Fire State".
- Binary coded address dip switch
- Two-wire multi-transmission
- Stable communication with resistance to noise and disturbances
- Self-test function for circuit disconnection and activation
- Expandable to connect with photoelectric smoke, rate of rise heat and fixed temperature heat detectors
- LED indication pattern, as follows : monitoring (flash at intervals of 2.5s), disconnection (flash at intervals 0.5s) and fire state (on)
- Can be fixed on alumunium railings for easy installment

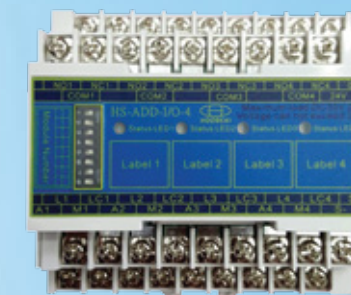
### SPEifications

- EOL : Below 10KΩ capacitor / address.
- Operating Environment : 0°C~50°C relative humidity below 85%
- Monitoring Current : 420 A
- Activating Current : 16mA
- Load Voltage Input : 24V DC (YRR-02)
- Rated Voltage : 33V AC
- Output Contact Capacity : 30V DC / 2A (max)
- Material : Flame retardant plastic
- Dimensions : 80 (H) x 60 (W) x 30 (D) mm
- Note : TYY EOL capacitor

### FEATURES

- Built-in tri-state LED indicator to indicate different statuses, "Monitoring", "Disconnection" and "Fire State"
- Binary coded address dip switch
- Two-wire multi-transmission
- Stable communication with resistance to noise and disturbances
- Self-test function for circuit disconnection and activation
- Expandable to connect with photoelectric smoke, rate of rise heat and fixed temperature heat detectors
- LED indication pattern, as follows : monitoring (flash at intervals of 2.5s), disconnection (flash at intervals of 0.5s) and fire state (on)
- Can be fixed on alumunium railings for easy installment

### Control Modules 4 In 4 Out



### SPEifications HS-ADD-I/O-4

- EOL : Below 10KΩ capacitor / address.
- Operating Environment : 0°C- 50°C relative humidity below 85%
- Monitoring Current : 3.2 mA
- Activating Current : 48mA
- Activating Current : 64mA (YRR-4L & YRR-4LO)
- Load Voltage Input : 24V DC (YRR-3LO & YRR-4LO)
- Rated Voltage : 33V AC
- Output Contact Capacity : 30V DC / 2A (YRR-3LO & YRR-4LO)
- Material : Flame retardant plastic
- Dimensions : 87 (H) x 93.5 (W) x 43 (D) mm
- Note : TYY EOL capacitor