Addressable Fire Alarm Control System 2100 series

It adopts new generation high-speed microprocessor technology that has a data processing speed and a data storage capacity 100 times and 1000 times higher than that of conventional technology respectively.

It has a 7.4”16-grey-scale LCD Chinese-supporting display and with a display resolution of 640×480.

Its operating interfaces simulate the menus and interfaces of Windows and therefore ensure operation habits similar to that of computers and is easy to learn.

It uses a flexibly and conveniently controllable standard PS/2 computer keyboard and mouse as on-site programming devices.

It provides a Chinese Pinyin input method and a Chinese section-position code input method and can therefore realize Chinese input freely and easily.

It can copy or restore both setting files and historical files through a CF intelligent storage card (optional), making system maintenance convenient.

It adopts a non-polarity two-bus intelligent alarm linkage mode and has a total of 324 intelligent detectors or modules for a single circuit. The addresses of the intelligent detectors
or modules may be hashed with No.1 to No.324. It is equipped with multiple high-speed CAN-bus interfaces, ensuring quick and reliable data transmission.

**Addressable Fire Alarm Control System 2189 Series**

**Introduction:**
Addressable fire alarm control system 2188 series is a newest non-polarity system, designed for less than 324 addresses system.

1. AW-AFP2189-324: 324 addresses

The 2188 series have the below detectors and accessories:

1. AW-ASD2188: addressable photoelectric smoke detector
2. AW-ATD2188: addressable fixed temperature heat detector
3. AW-ASH2188: addressable smoke and heat combined detector
4. AW-AMC2188: addressable manual call point
5. AW-ASS2188: addressable hooter/horn
6. AW-AIO2188-IN: addressable input module
7. AW-AIO2188-OUT: addressable out module
8. AW-CODER2188: coder for setting address
9. AW-RP2188: repeater

The 2188 series is a economic, reliable, and user-friendly system.

**Addressable Fire Alarm Panel AW-AFP2189**
Features:
Addressable photoelectric smoke detector AW-ASD2188
I. Product overview

AW-ASD2188 Addressable smoke detector (Detector hereunder) is a kind of photoelectric smoke detector. With an internal microprocessor, it supports electronic coding and is accessed through a compatible fire alarm control panel of AW-AFP2188 via a two-wire bus. The detector realizes real-time acquisition of the in situ smoke concentration data and sends back the data to a fire alarm control panel. It can also receive and execute the control commands given by a fire alarm control panel. The detector is suitable for such industrial and civil buildings that have a great deal of smoke during fires but no smoke under normal circumstances, such as restaurants, hotels, teaching buildings, office buildings, computer rooms, communication machine rooms, libraries and archives. It is not suitable for places with a great deal of retained dust and water mist, places where steam and/or oil mist may be generated and places with retained smoke under normal circumstances.

Product features
✓ It can realize electronic coding and rewrite the address via coder in situ.
✓ Within a single-chip microcomputer, it can process the sampling data in real-time, save the latest 144 historical data and realize a curve tracing for the field situation.
✓ It has a temperature, humidity and dust accumulation drift compensation function and a sensor fault detection function (fault reporting to fire alarm control panel).
✓ Non-polarity, two-bus connection that ensures convenient installation and maintenance.
✓ Designed with an upper cover and a lower cover and installed on an independent base, it can be installed, debugged and maintained conveniently.

III. Technical parameters
1. Executive standard: GB4715-2005
2. Operating voltage: 24V (pulse modulation)
3. Operating current: <300uA (monitoring status) or <1.5mA (alarm status)
4. Work indication: The red indicator will blink in the monitoring status or remain lit in the alarm status.
5. Weight: about 70g
6. External dimensions: diameter: 100mm, height: 55mm (with the base)
7. Wiring method: non-polarity two-bus system (L1, L2)
I. Product overview

AW-ATD2188 addressable heat detector (Detector hereunder) is a mated product of the 2188 series fire alarm control panels. It uses a two-bus work mode. With an internal microprocessor, it supports electronic coding. The detector realizes real-time acquisition of the in situ temperature data and sends back the data to a fire alarm control panel. It can also receive and execute the control commands given by a fire alarm control panel. When in a routing inspection, the detector indicator will blink. When there is a fire in the monitored area and the temperature has reached the alarm threshold, the fire alarm control panel will confirm a fire alarm according to the received message sent from the detector, and the detector indicator will light at the same time to indicate a fire alarm.

The detector is suitable for such industrial and civil buildings that have a great deal of heat when fire takes place, such as kitchens, boiler rooms, generator rooms, drying workshops and smoking rooms and is not suitable for places with a great deal of smoke but little heat.

Product features

✓ It can realize electronic coding and rewrite the address via coder in situ.
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- Within a single-chip microcomputer, it can realize real-time data acquisition and processing, realize a curve tracing for the field situation.
- It has a temperature compensation function and a sensor fault detection function (fault reporting to fire alarm control panel).
- Non-polarity, two-bus connection that ensures convenient installation and maintenance.
- Designed with an upper cover and a lower cover and installed on an independent base, it can be installed, debugged and maintained conveniently.

III. Technical parameters

1. Executive standard: GB4716-2005
2. Operating voltage: 24V (pulse modulation)
3. Operating current: < 300μA (monitoring status) or < 1.5mA (alarm status)
4. Work indication: The red indicator will blink in the monitoring status or remain lit in the alarm status.
5. Weight: about 47g
6. Product class: A2
7. External dimensions: diameter: 100mm, height: 56mm (with the base)
8. Wiring method: non-polarity two-bus system (L1, L2)
9. Operating environment: Indoor, temperature: -10 ℃ ~ +50 ℃; relative humidity: ≤95% (40℃±2℃, without condensation)
10. Coding mode: It can realize electronic coding via coder in situ. Address codes 1 to 324 are available for selection.
11. Installation height: ≤8m
12. Protection area: about 60m². For details, see related provisions in GB50116-98 Code for Design of Automatic Fire Alarm System.
13. Matched host machine: fire alarm control panel (such as AW-AFP2188)

Addressable smoke and heat combined detector

AW-ASH2188

I. Product overview

AW-ASH2188 addressable point type hybrid smoke and heat combined detector (Detector
hereunder) is a multi-complex by the smoke detector sensor and semiconductor temperature sensors from the process structure and together constitute the circuit structure. It not only has a photoelectric smoke detector performance, and both temperature fire detector performance.

This detector is for the promise of the second bus system, with the company’s 2188 series of alarm controller supporting.

II. Product features

✓ Electronic coding, project commissioning simple and reliable;
✓ The Promise of wire bus;
✓ With the key components of self-diagnostic function;
✓ With drift compensation function and the accumulation of dust pollution reporting functions.

III. Technical parameters

1. Executive standard: GB 4715-2005, GB4716-2005
2. Operating voltage: 24V (pulse modulation)
3. Operating current: ≤0.5mA (monitoring status) or < 1.5mA (alarm status)
4. Sensing technology: the use of photoelectric sensors and temperature sensors dual sensor technology, thermal type: A2
5. Weight: about 100g
6. Encoding: Electronic, coding range is 1 to 324
7. External dimensions: diameter: 100mm, height: 55mm (with the base)
8. Wiring: Promise of wire
9. LED: red, blinking about once every 12 seconds when the patrol, alarm always
10. Operating environment: Indoor, temperature: -10 °C ~ +50 °C; relative humidity: ≤95% (40°C±2°C, without condensation)
11. Installation height: ≤8m
12. Shell Material: ABS
13. Protection area: about 60m². For details, see related provisions in GB50116-98 Code for Design of Automatic Fire Alarm System.
14. Matched host machine: fire alarm control panel (such as AW-AFP2188)

Addressable manual call point AW-AMC2188
I. Product overview
The AW-AMC2188 addressable manual call point (manual call point for short) is mainly designed to be used with an intelligent two-bus control panel. If it is pressed after a fire is manually confirmed, an alarm signal may be sent to a fire alarm control panel which will, after receiving the alarm signal, display the coded address and the equipment status of the manual call point. When the manual call point is operating normally, the red indicator will blink; when there is a fire alarm, it will remain lit. The manual call point supports electronic coding and has a built-in fire telephone jack and a PHONE indicator, making its engineering application convenient.

II. Product features
 It can realize complete electronic coding and in situ rewriting with help of a coder.
 Designed with an upper cover and a lower cover, it can be installed, debugged and maintained conveniently.
 It is designed with a two-wire fire telephone jack and is therefore more applicable to engineering application.
 Designed with passive output contacts, it can control other external equipment directly through an intermediate relay.
 The pressing sheet on the manual call point will not get crushed after it is pressed, but can be reset by a special tool, so it can be used repeatedly.

III. Technical parameters
1. Executive standard: GB19880-2005
2. Operating voltage: 24V (pulse modulation)
3. Operating current: < 300uA (in the monitoring status); < 2mA (in the action status)
4. Output contact: Normally open contact; capacity: 0.1A/30VDC
5. Weight: About 120g
6. Wiring method: nonpolar two-bus system (L1, L2)
7. Operating environment: Indoor, temperature: - 10℃ ~ + 50℃; relative humidity: ≤95% (40℃±2℃, without condensation)
8. Coding method: It can realize online coding with the help of a coder and without the necessity of disassembling the bus (however, the equipment must be powered off). Address codes 1 to 324 are available for selection.
9. Telephone jack: Two-wire fire telephone jack (equipped with a standard Φ...
Addressable hooter/horn AW-ASS2188

I. Product overview
The AW-ASS2188 addressable hooter/horn (hooter/horn for short) is a kind of product manufactured by our company to be used with bus-type fire alarm control units. Controlled by a microprocessor, the hooter/horn can realize real-time communication with a bus-type fire alarm control unit and receive the control commands sent by it. When in a routing inspection, the red status indicator will blink; after an accident happens, the hooter/horn will start to operate after receiving a startup command from the bus-type fire alarm control unit. The red status indicator will remain lit and the hooter/horn will give a flashing signal and an audible alarm signal to notify the persons on the scene of the accident that a fire has occurred on the site and of the necessity to take related evacuation measures, thus preventing the fire accident from becoming a major one. The hooter/horn may be restored to the monitoring status after the MUTE or RESET key on the bus-type fire alarm control unit is pressed.

The hooter/horn may be used to give audible alarms and flashing alarms on the scenes of accidents. It is suitable for places like high-rise residential buildings, public places, hotels, amusement buildings, factories, shopping centers, hospitals, schools, office buildings and stock exchanges, particularly places with low visibility or the possibility of generation of smoke.

II. Product features
- It can realize complete electronic coding and in situ rewriting with the help of a coder.
- The audible alarm and flashing alarm may be set freely. In other words, the hooter/horn may give an audible alarm and a flashing alarm at the same time or...
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separately and it can be adapted to different working environments.

✓ Designed with an upper cover and a lower cover, it can be installed, debugged and maintained conveniently.
✓ It uses multiple super bright red LEDs as light sources for visual display, ensuring a striking display, a longer service life and low power consumption.

III. Technical parameters

1. Executive standard: GA385-2002
2. Operating voltage: DC24V (pulse modulation)
3. Operating current: quiescent current: ≤1mA (the current consumed by the bus); alarm current: ≤120mA@DC24V
4. Operating environment: Temperature: -10℃ ~ +55℃; relative humidity: ≤95% (40℃, without condensation)
5. Flushing rate: one time/s
6. Alarm volume: > 85dB (measured at a place 3m in front of the hooter/horn)
7. Coding method: Electronic coding
8. Wiring method: Four-wire system, non-polarity two signal buses (L1, L2) and power lines (+24V, GND)
9. Matched host machine: fire alarm control panel (such as AW-AFP2188)

Addressable input module AW-AIO2188-IN
I. Overview
The AW-AIO2188-IN Intelligent input module (AW-AIO2188-IN module for short) is used with AW-AFP2188, a two-bus fire alarm control panel. It can be connected with a conventional smoke detector, a conventional heat detector, a conventional manual call point, a conventional hooter/horn and some other equipment. After the said equipment starts to operate, the alarm signal output will be sent by the AW-AIO2188-IN module to the fire alarm control panel through a signal bus to give a fire alarm.

II. Features and technical parameters
1. Mode of operation: Nonpolar two-wire system
2. Quiescent current: < 0.5mA (bus); < 6mA (power line)
3. Action current: < 2mA (bus); < 15mA (power line)
4. Operation indicator: The inspection indicator will blink once about every 12 seconds in the inspection status or remain lit in the operation status.
5. Operating environment: Temperature: -10°C ~ 50°C; relative humidity: ≤ 95% (40°C±2°C, without condensation)
6. Terminal load: 4.7K resistance
7. External dimensions: 86×86×40(mm)
8. Weight: about 119g

Addressable output module AW-AIO2188-OUT
I. Overview
The AW-AIO2188-OUT Intelligent Input/Output Module (AW-AIO2188-OUT module for short) is used with AW-AFP2188, a two-bus linkage fire alarm control panel. It is mainly used to realize an output control for fire linkage equipment (such as smoke dampers, blow valves and fire dampers) and receive the feedback signals of the fire linkage equipment so that a judgment on whether or not the fire linkage equipment is operating normally can be done.

II. Features and technical parameters
1. Mode of operation: Nonpolar two-wire system
2. Quiescent current: < 0.6mA (power-down mode)
3. Action current: < 10mA
4. Capacity of the output control contact: 2A@DC30V
5. Operation indicator: The inspection indicator will blink once about every 12 seconds in the inspection status or remain lit in the output status; the input indicator will remain lit in the feedback status.
6. Operating environment: Temperature: -10℃ ~ 50℃; relative humidity: ≤95% (40℃±2℃, without condensation)
7. Terminal load: 47K resistance
8. External dimensions: 86×86×40(mm)
9. Weight: about 130g
10. Executive standard: GB16806-2006
I. General description

AW-CODERF900E address writer is a kind of peripheral auxiliary equipment designed for matching the application of detectors and modules, etc., mainly used to write an address code to a detector or a module, etc. and read an address code from them.

II. Functions and features

1. Power can be supplied by using lithium batteries, external power 24VDC or external power adapter;
2. Lower power consumption, portable, convenient for utilization;
3. Automatic shutdown and low voltage inspection functions.

Repeater AW-RP2188

The AW-RP2188 fire display panel (Repeater) is a kind of microprocessor-controlled fire display panel developed by our company. Each display panel is connected to a fire alarm control panel produced by our company via a special RS-485 interface to process and display the data sent from the fire alarm control panel. Each floor of a building may have a display panel installed. When there is a fire alarm on the floor where the display panel is installed, or the neighboring floor above or below it, the display panel will give a horn/strobe alarm and display the floor No., the room No., and some other position information of the fire alarm.
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II. Product features

- Each display panel is connected with a fire alarm control panel via a RS-48 bus. At most 99 display panels may be connected with each RS-485 bus.
- The display panels can display fire alarm messages or feedback messages only rather than fault messages, action messages or other messages.
- A fire alarm control panel may be used for setting the display area of a display panel. The set display panel can display the fire alarm messages of the designated area (floor display) only. Note: See the User’s Manual of the fire alarm control panel for the setting method.

III. Technical parameters

2. Display capacity: Each display panel can display the fire alarm messages of floors -10~90 and at most 99 fire alarm messages or feedback messages.
3. Wiring system: Four-wire system, power lines (+24V, GND) and RS485 signal lines (485A, 485B)
4. Operating environment: Indoor; temperature: -10°C ~ +50°C; relative humidity: ≤95% (40°C, without condensation)
5. Power supply: DC 24V ±20 %
6. Overall power consumption: < 3W
7. Contact capacity: Relay dry contacts, normally open or normally closed, capacity: 1.25A/DC30V (resistive load)

Isolater AW-ISO2188

AW-ISO2188 short circuit isolators are used for the short circuit fault protection of buses.
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When a bus circuit is operating normally, the AW-ISO2188 short circuit isolator will not operate; when a short circuit fault occurs at a place at the output end of the short circuit isolator in the bus circuit (short-circuit current > 200mA), the section suffering the short circuit fault will be cut off from the bus, thus ensuring the normal communication of the other sections of the bus. Upon elimination of the short circuit fault, the short circuit isolator can automatically bring the isolated section into the system again. A short circuit isolator will make it convenient to confirm the location suffering a short circuit fault. The short circuit isolator does not need coding nor occupies the address in the bus circuit.

II. Main technical parameters

1. Mode of operation: Nonpolar two-wire system
2. Quiescent current: < 5.0mA
3. Operative current: > 200mA
4. Operation indicator: Red (It is out in the normal monitoring status or remains lit in the operation status)
5. Operating environment: Temperature: - 10°C ~ 50°C; relative humidity: ≤ 95% (40°C ± 2°C, without condensation)
6. External dimensions: 86 × 86 × 40mm (with the base)
7. Weight: about 125g (with the base)