



FLAME DETECTOR SERIES





IR3 Flame Detector RFD-3000

Features

RFD-3000 is a Triple IR (IR3) Flame Detector with international certifications. Identify fire by analyzing the IR wavelengths of a long distance flame. Maximum 60 meters of detection range with a 90 degree cone of vision. User selectable output options among Relays, 4-20mA stepped output, and RS-485.

- Multispectrum IR sensors
- Enhanced False Alarm Immunity against sunlight and artificial false alarm sources
- High reliability in operation with Automatic and Manual Self-Diagnosis
- Suitable for high area such as a terminal, warehouse, and shopping mall
- Field selectable sensitivity and delay time

Technical Specifications

Specification

- Type : Triple Infrared
- Detection Range : 200ft(60m) for n-Heptane fire
- Field of View : Horizontal 90°, Vertical 90°
- Temperature Range Operating : -40°C to +75°C
- Storage : -50°C to +80°C
- Humidity Range : 0 to 95% relative humidity
- Output
 - Relay
 - Fire Alarm, Fault Alarm, Warning Alarm
 - From A or B Selectable, 28vdc, 2A
 - 4-20mA
 - RS-485

Structure

- Dimensions : W150 x H103 x D125 mm (W5.9 x H4.1 x D4.9 Inch)
- Enclosure Material : Aluminum
- Shipping Weight : 1.2kg
- Color : Ivory White
- Conduit Entry Size : 2 x 1/2 inch PF.

Electrical

- Operating Voltage : Typical DC24V (18 to 30)
- Power Consumption : 4.5W maximum at 30 vdc
- Wiring : 14AWG(2.08mm²) to 24AWG(0.205mm²) shielded cable recommended.
- Electromagnetic Compatibility : EMC Protected



IR3 Flame Detector RFD-3000X

Features

RFD-3000X is a Triple IR (IR3) Flame Detector with international certifications. Identify fire by analyzing the IR wavelengths of a long distance flame. Maximum 60 meters of detection range with a 90 degree cone of vision. Permits operation at Hazardous areas. User selectable output options among Relays, 4-20mA stepped output, and RS-485.

- Multispectrum IR sensors
- Approval for FM, ATEX, IECEx, CCCF, NEPSI, KFI and KGS
- High reliability in operation with Automatic and Manual Self-Diagnosis
- Enhanced False Alarm Immunity against sunlight and artificial false alarm sources
- Approval for Explosion-Proof and Dust Ignition proof
- Suitable for hazardous areas such as Oil, Gas stations and Petrochemical plants
- Excellent resistance to corrosion
- Field selectable sensitivity and delay time

Technical Specifications

Specification

- Type : Triple Infrared
- Detection Range : 200ft(60m(FM)), 50m(KFI) for n-Heptane fire
- Field of View : Horizontal 90°, Vertical 90°
- Temperature Range Operating : -40°C to +75°C
- Humidity Range : 0 to 95% relative humidity
- Explosion proof :
 - Ex d IIB+H2 T5 IP66/67(KGS)
 - II 2G Ex db IIB+H2 T5 Ta= -40°C to 75°C IP66 / IP67(ATEX)
 - Class I Division 1 Groups B,C and D(FM)
 - Class II Division 1 Groups E,F and G(FM)
 - Class III (FM)
 - Ex dIIC T5 Gb DIP A21 TA, T5 IP67(NEPSI)
- Output
 - Relay
 - Fire Alarm, Fault Alarm, Warning Alarm
 - From A or B Selectable, 30vdc, 3A
 - 4-20mA
 - RS-485

Electrical

- Operating Voltage : Typical DC24V (18 to 30)
- Power Consumption : 4.5W maximum at 30 vdc
- Wiring: 14AWG(2.08mm²) to 24AWG(0.205mm²) shielded cable recommended.
- Electromagnetic Compatibility : EMC Protected

Structure

- Dimensions : W134 x H117 x D112 mm (W5.3 x H4.6 x D4.3 Inch)
- Enclosure Material : Stainless steel 316
- Shipping Weight : 7.5 kg
- Color : Metal
- Conduit Entry Size : 2 x 1/2 inch NPT, M20X1.5



UVIR Flame Detector RFD-2000

Features

RFD-2000 is a UV/IR type Flame Detector with international certifications. Identify fire when both UV and IR sensors simultaneously detect the presence of a flame. Maximum 30 meters of detection range with a 90 degree cone of vision. User selectable output options among Relays, 4-20mA stepped output, and RS-485. .

- UV/IR Dual-sensors
- Enhanced False Alarm Immunity against sunlight and artificial false alarm sources
- High reliability in operation with Automatic and Manual Self-Diagnosis
- Suitable for general areas such as gymnasium, commercial facilities, and cultural heritage
- Field selectable sensitivity and delay time

Technical Specifications

Specification

- Type : Ultraviolet and Infrared
- Detection Range : 100ft(30m(FM)), 15m(KFI)) for n-Heptane fire
- Field of View : Horizontal 90°, Vertical 90°
- Temperature Range Operating : -40°C to +75°C
- Humidity Range : 0 to 95% relative humidity
- Output
 - Relay
 - Fire Alarm, Fault Alarm, Warning Alarm
 - From A or B Selectable, 28vdc, 2A
 - 4-20mA
 - RS-485

Structure

- Dimensions : W150 x H125 x D103 mm (W5.9 x H4.92 x D4.05 Inch)
- Enclosure Material : Aluminum alloy
- Shipping Weight : 2.2kg
- Color : Ivory
- Conduit Entry Size : 2 x 1/2 inch PF

Electrical

- Operating Voltage : Typical DC24V (17 to 32).
- Power Consumption : 1.8W maximum at 32 vdc
- Wiring : 14AWG(2.08mm²) to 24AWG(0.205mm²) shielded cable recommended.
- Electromagnetic Compatibility : EMC Protected



UVIR Flame Detector RFD-2000X

Features

RFD-2000X is a UV/IR type Flame Detector with international certifications. Identify fire when both UV and IR sensors simultaneously detect the presence of a flame Maximum 30 meters of detection range with a 90 degree cone of vision. Permits operation at Hazardous areas. User selectable output options among Relays, 4-20mA stepped output, and RS-485.

- UV/IR Dual-sensors
- Enhanced False Alarm Immunity against sunlight and artificial false alarm sources
- Approval for Explosion-Proof and Dust Ignition proof
- High reliability in operation with Automatic and Manual Self-Diagnosis
- Suitable for hazardous areas such as Oil, Gas stations and Petrochemical plants
- Field selectable sensitivity and delay time

Technical Specifications

Specification

- Type : Ultraviolet and Infrared
- Detection Range : 100ft(30m) for N-Heptane fire
- Field of View : Horizontal 90°, Vertical 90°
- Temperature Range Operating : -40°C to +75°C
- Storage : -50°C to +80°C
- Humidity Range : 0 to 95% relative humidity
- Explosion proof :
 - Class I Division 1 Groups B,C and D(FM)
 - Class II Division 1 Groups E,F and G(FM)
 - Class III (FM)
 - Ex db IIB+H2 T6(ATEX, KGS)
- Output
 - Relay
 - Fire Alarm, Fault Alarm, Warning Alarm
 - From A or B Selectable, 28vdc, 2A
 - 4-20mA
 - RS-485

Structure

- Dimensions : W134 x H117 x D120 (mm) (W5.3 x H4.6 x D4.7 (inch)
- Enclosure Material : Stainless steel 316
- Shipping Weight : 3.4 kg
- Color : Metal
- Conduit Entry Size : 2 x 1/2 inch NPT, M20X1.5

Electrical

- Operating Voltage : Typical DC24V (17 to 32)
- Power Consumption : 1.8W maximum at 32 vdc
- Wiring : 14AWG(2.08mm²) to 24AWG(0.205mm²) shield cable recommended.
- Electromagnetic Compatibility : EMC Protected



UVIR Flame Detector RFD-2000X-H

Features

RFD-2000X-H is a UV/IR type hydrogen Flame Detector with international certifications. Identify fire when both UV and IR sensors simultaneously detect the presence of a hydrogen and hydrocarbon based flame. Maximum 30 meters of detection range with a 90 degree cone of vision. Permits operation at Hazardous areas. User selectable output options among Relays, 4-20mA stepped output, and RS-485.

- UV/IR Dual-sensors
- Detects Hydrogen and Hydrocarbon based flames
- Enhanced False Alarm Immunity against sunlight and artificial false alarm sources
- Approval for Explosion-Proof and Dust Ignition proof
- High reliability in operation with Automatic and Manual Self-Diagnosis
- Suitable for hazardous areas such as Oil, Gas stations and Petrochemical plants
- Field selectable sensitivity and delay time

Technical Specifications

Specification

- Type : Ultraviolet and Infrared, Hydrogen flame detector
- Detection Range : 100ft(30m) for n-Heptane fire 15ft(4.5m) for Hydrogen (30" plume)
- Field of View : Horizontal 90°, Vertical 90°
- Temperature Range Operating : -40°C to +75°C
- Humidity Range : 0 to 95% relative humidity
- Explosion proof :
 - Class I Division 1 Groups B,C and D(FM)
 - Class II Division 1 Groups E,F and G(FM)
 - Class III (FM)
 - Ex d IIB+H2, T6(ATEX)
- Output
 - Relay
 - Fire Alarm, Fault Alarm, Warning Alarm
 - From A or B Selectable, 28vdc, 2A
 - 4-20mA
 - RS-485

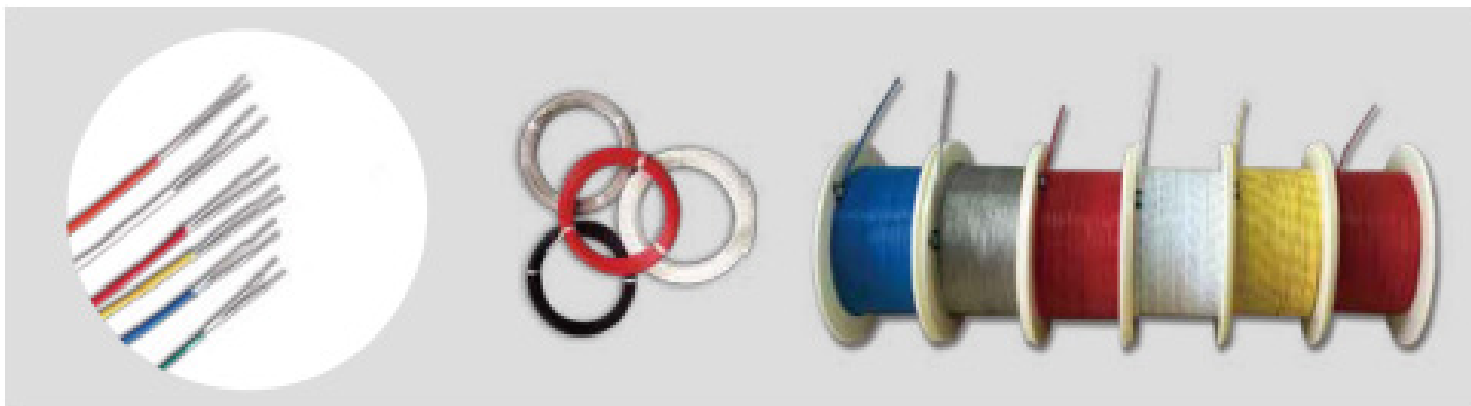
Structure

- Dimensions : W134 x H117 x D120 (mm) W5.3 x H4.6 x D4.7 (inch)
- Enclosure Material : Stainless steel 316
- Shipping Weight : 3.4 kg
- Color : Metal
- Conduit Entry Size : 2 x 1/2 inch NPT, M20 x 1.5

Electrical

- Operating Voltage : Typical DC24V (17 to 32)
- Power Consumption : 1.8W maximum at 32 vdc
- Wiring : 14AWG(2.08mm²) to 24AWG(0.205mm²) shield cable recommended.
- Electromagnetic Compatibility : EMC Protected

Digital Type Linear Heat Detectors MS1000 and MS 1001 Series



MS1000 Series

Compared with other kinds of detectors, MS1000 Digital Linear Heat Detector provides a very-early alarm detecting function to the protected environment, The detector can be known as an intelligent "switch" type detector. The polymers between the two conductors will break down at specific fixed temperature allowing the conductors contact, the short circuit will initiate the alarm. The detector has a continuous sensitivity. The sensitivity of linear heat detector will not be influenced by the environment temperature changing and the length of detection cable using. It does not need to be adjusted and compensation. The detector can transfer both alarm and fault signals to control panels normally with DC24V or without DC24V.

Linear Heat Detection Cable

1. Classification

- This type of Linear heat detection cable is the most widely indoor used with strong stability.
- CR/OD Type not only has good UV resistance and good weather resistance, strongly recommended for outdoor using even under bad weather conditions, but also with high performance of acid resistant, alkali-resistant, salt spray resistant.
- Explosion Proof Type. Two main application environments: harsh EMI environment and explosive hazardous environment. The outer jacket of this type is protected by woven metal mesh with good performance of anti-EMI and eliminating the surface static of the Linear heat detection cable. We can use this type Linear heat detection cable in explosive hazardous environment with safety fence. During the installation, please make grounding connection of the woven metal mesh. Used in harsh EMI environment, single end grounding connection or double ends grounding connection should be specified after analysis of the interference sources.

2. Structure

Intertwisting two rigid metallic conductors which are covered by NTC heat sensitive material, with insulative bandage and outer jacket, here comes the Digital Type Linear Heat Detection Cable of P.T.S. And the different model numbers depend on the variety of materials of outer jacket to meet different special environments.

3. Features and benefits

- Industrial safety design
- Electrical interface with low power consumption design
- Real-time monitoring
- Working with DC24V supply or without DC24V supply
- Fast response time
- No alarm temperature compensation needed
- Compatible to any kind fire alarm system
- + Plenty levels of alarm temperatures: from 68°C to 150°C

4. Technical parameter

- Operating Voltage: DC 24V
- Allowed Voltage Range: 16VDC-28VDC
- Standby Current: ≤ 20mA
- Alarm Current: ≤ 30mA
- Fault Current: ≤ 25mA
- Maximum Relative Humidity for Long Term Use: 90% - 98%
- IP Rating: IP66
- Alarm temperatures: 68°C, 88°C, 105°C, 138°C & 180°C

Digital Type Linear Heat Detectors MS1000 and MS 1001 Series



MS1000-I Linear Detector Interface

Control Unit MS1000-I is used for MS1000, MS1000-CR/OD and MS1000-EP digital type Linear Heat Detection Cable. MS1000 is a digital type Linear Heat Detection Cable with comparatively simple output signal, the Control Unit and EOL box are easy to install and operate.

- Interface for MS1000, MS1000-CR, MS1000-OD and MS1000-EP digital linear heat cable
- With local fire and fault indication
- Fire and fault relay output available
- Low-power design
- Metal case

Technical Specifications

- Operating Voltage: 24VDC
- Operating Voltage Range: 16VDC-28VDC
- Operating Current: Standby Current: $\leq 20\text{mA}$
- Fire Current: $\leq 30\text{mA}$
- Fault Current: $\leq 25\text{mA}$
- Operating environment: Temperature: -55°C - 60°C
- Relative humidity: 95%
- IP Rating : Ip66
- Dimensions: 90mm \times 85mm \times 52mm(L \times W \times H)



MS1000-P End of Line Unit

EOL Box for MS1000, MS1000-CR/OD and MS1000-EP digital Linear Heat Detection Cable.

- End of Line Unit for MS1000, MS1000-CR, MS1000-OD and MS1000-EP digital linear heat cable
- The functions are balancing the signal status
- For Digital linear heat cable monitoring and alarm/fault simulating

Technical Specifications

- Operating Voltage: No Electronics
- Operating environment: Temperature: -55°C - 60°C
- Relative humidity: 95%
- IP Rating: IP66
- Dimensions: 90mm \times 85mm \times 52mm(L \times W \times H)

The background of the entire image is a close-up, high-contrast photograph of flames. The fire is bright orange and yellow, with dark, swirling smoke rising from it. The flames are dynamic and intense, filling the upper two-thirds of the frame.

SALES

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