



# UV/IR and IR4 Flame Detector

**Model: SFD-1000U/SFD-1000R**

## General Characteristics:

Automatic Built-in-Test  
 High Immunity to False Alarms  
 Ingress Protection: IP66 (EN60529)  
 Housing Material: Aluminum Die-cast  
 Dimension: 166x127x102  
 Weight: Appx. 1.5 Kg  
 Cable Entry: 2xM20  
 Cable Tyoe: 3x1.5 mm<sup>2</sup>  
 Humidity: 95% RH  
 Operating Temperature: -20° to +60°  
 Power Supply: 400 mA max @ 18-30 VDC  
 Output Signals:  
 - 4-20 mA Analog (Source)  
 1 Alarm Relay De-energized Normally Open (Rating 7A 230 VAC)  
 1 Fault Relay Energized Normally Open (Rating 7A 230 VAC)



## Accessories:

UV/IR Simulator: SFD-1000-US  
 IR4 Simulator: SFD-1000-RS  
 Sunshade: SFDSS  
 Pipe mount 2" U Bolt: SFD2PM  
 Swivel Mounting Rotatable: SFD5M

## Ordering Number

### SFD-1000- X (Sensor)- Y (Material)- T (SIL Rated)

U: UV/IR  
 R: IR4

Y: Aluminum

Y: SIL2  
 N: No-SIL

# UV/IR and IR4 Flame Detector

## SFD-1000R

## SFD-1000U

**Sensor:**

IR4

UV/IR

**Spectral Response:**

IR: 3-5  $\mu\text{m}$

UV: 185-260 nm  
IR: 4.2-4.6  $\mu\text{m}$

**Detection Range:**

N-Heptane 0.1 m<sup>2</sup> Pane Fire

**-Low Sensitivity:**

30 m

20 m

**-Medium Sensitivity**

40 m

25 m

**High Sensitivity**

50 m

30 m

**-Very High Sensitivity**

60 m

35 m

**Response Time**

5 Second

5 Second

**Cone of Vision**

V: 100° - H: 100°

V: 100° - H: 100°

**SIL Rating according to IEC 61508:**

SIL2

SIL2

**Explosion Proof: IEC 60079**

ATEX:  
II 2G Exdb IIC T6 Gb

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**Other Standards**

**Operational:**

EN54-10

**EMC:**

IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4,  
IEC 61000-4-5, IEC 61000-4-6

**Environmental Resistance Standards:**

IEC 60068-2-1, IEC60068-2-78, IEC60068-2-30

**Vibration Resistance Standards:**

IEC 60068-2-6

**Shock Resistance Standards:**

IEC 60068-2-27

**Impact Resistance Standards:**

IEC 62262