

# REZONTECH FLAME DETECTOR

THE BEST SOLUTION FOR FIRE DETECTION SYSTEM





# REZONTECH FLAME DETECTOR

**Designed and manufactured in South Korea, under Rezontech's technology and the own strict quality control system with international laboratories such as FM, ATEX, CCCF, IECEX, KFI(Korea Fire Institute) and so on. This expertise and responsibility for quality will make Rezontech meet all your needs from the fire detection.**

Rezontech Co., Ltd. is the world-class Flame Detector Manufacturer has been leading Flame Detector market in Korea since 2004.

We developed first-ever UV/IR & Triple IR type Flame Detectors in Korea with own unique technology.

Rezontech keeps growing with continuous R&D for fire detection technology. Thus we acquired 20 global certificates and approvals on Flame Detectors and exported it over 50 countries in the world. We are proud to supply state of the art Flame Detectors along with the Automatic Gas Suppression system to the industry leading sites & military facilities to protect human life & asset from the fire disaster.

We will conquer the global market based on our continuous effort, know-how & reliability with the best service and best quality.



## PRINCIPLE

The Rezontech flame detector can promptly analyze sensory inputs from the ultraviolet and infrared light sources emitted by a flame to alert against fires.

IR3 flame detection sensing three specific wavelength bands within the Infrared spectral region that are algorithmically analyzed. UV/IR flame detector uses UV/IR wavelength signals comparing to detect fire and minimizes false alarm.

Flame detectors are less spatial and environmental constraints such as outdoor high ceilings of industrial sites, where ordinary heat/smoke detectors cannot be used.



## ADVANTAGES

### Cost effective design

Providing an economical solution by long and wide detection range

### Explosion-Proof

Achieved international certificates to be used in hazardous areas

### False alarm immunity

Highly precise and responsive detection using our own unique algorithm

### Early Fire detection

Flame Detector can detect fire typically within 5 seconds using optical Ultraviolet and Infrared sensors

### Fast Delivery

Best efforts to the faster delivery to satisfy our valuable customers

### Easy installation

Simple and easy Installation for anyone and any site



## APPLICATION

- Oil & Gas Facilities
- Iron & Steel Facilities
- Power Station
- Chemical Facilities
- Shipyards
- Automobile Manufacturing Facilities
- Refineries
- Semi-Conductor Facilities
- UNESCO World Heritage
- Historical Site

# UV/IR FLAME DETECTOR



## RFD - 2000

**Type** | UV/ IR  
**Model** | RFD-2000  
**Detection Range** | 98.5ft(30m)  
**Field Of View** | H90° V90°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | Aluminum Alloy  
**Dimension** | W150 H125 D103mm  
**Weight** | 1.8kg  
**Response** | Typically 5 seconds

### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (17 VDC to 32 VDC)  
**Power Consumption** | 1.8W maximum at 32VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 2 x 1/2inch PF.

### APPROVALS

**Performance** | FM3260  
**Protection** | IP67, NEMA Type 4X

## RFD - 2000X

**Type** | UV/ IR  
**Model** | RFD-2000X  
**Detection Range** | 98.5ft(30m)  
**Field Of View** | H90° V90°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | SUS 316  
**Dimension** | W134 H117 D120mm  
**Weight** | 3.2kg  
**Response** | Typically 5 seconds

### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (17 VDC to 32 VDC)  
**Power Consumption** | 1.8W maximum at 32VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 2 x 1/2" NPT, M20 X 1.5 inch

### APPROVALS

**Performance** | FM3260  
**Explosion-Proof** | FM Class I Division 1 Groups B, C and D, Class II Division 1 Groups E, F and G, Class III, ATEX/IECEx Ex db IIB + H2, T6  
**Protection** | IP67, NEMA Type 4X



## RFD - 2FTN

**Type** | UV/ IR  
**Model** | RFD-2FTN  
**Detection Range** | 98.5ft(30m)  
**Field Of View** | H100° V100°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | Aluminum 6061  
**Dimension** | W64 H64 D75mm  
**Weight** | 0.53kg  
**Response** | Typically 5 seconds

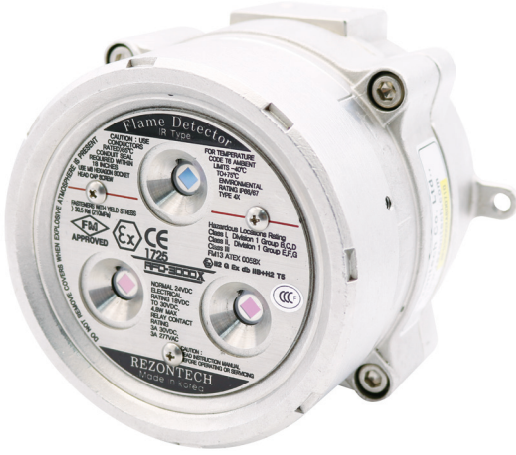
### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (17 VDC to 32 VDC)  
**Power Consumption** | 5.8W maximum at 32VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 1/2 inch NPT

### APPROVALS

**Performance** | CCCF, KFI  
**Explosion-Proof** | ATEX, NEPSI, EX-GOST  
 ATEX Ex db IIC T6 / T5 Gb  
 ATEX Ex tb IIIC T85°C / T95°C Db  
**Protection** | IP66, IP67

# IR3 & HYDROGEN FLAME DETECTOR



## RFD - 3000

**Type** | IR3  
**Model** | RFD-3000  
**Detection Range** | 197ft(60m)  
**Field Of View** | H90° V90°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | Aluminum Alloy  
**Dimension** | W150 H103 D125mm  
**Weight** | 1.7kg  
**Response** | Typically 5 seconds

### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (18 VDC to 30 VDC)  
**Power Consumption** | 4.5W maximum at 30VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 2 x 1/2 inch PF

### APPROVALS

**Performance** | FM3260, CCCF  
**Protection** | IP67, NEMA Type 4X

## RFD - 3000X

**Type** | IR3  
**Model** | RFD-3000X  
**Detection Range** | 197ft(60m)  
**Field Of View** | H90° V90°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | SUS 316  
**Dimension** | W134 H117 D112mm  
**Weight** | 4kg  
**Response** | Typically 5 seconds

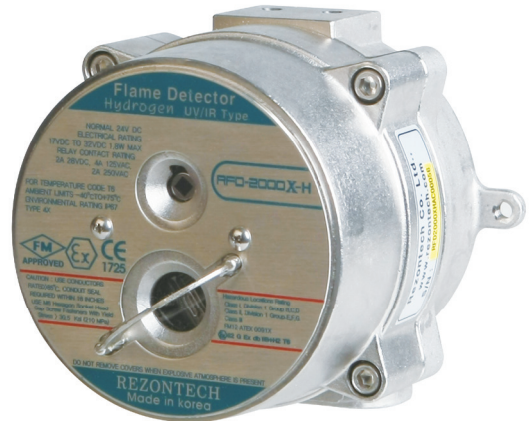
### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (18 VDC to 30 VDC)  
**Power Consumption** | 4.5W maximum at 30VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 2 x 1/2" NPT, M20 X 1.5 inch

### APPROVALS

**Performance** | FM3260, CCCF, KFI  
**Explosion-Proof** | FM Class I Division 1 Groups B, C and D Class II Division 1 Groups E, F and G Class III, ATEX/IECEX/NEPSI Ex db IIB + H2, T5  
**Protection** | IP66, IP67, NEMA Type 4X

## Hydrogen Flame Detector



## RFD - 2000X-H

**Type** | UV/IR & Hydrogen  
**Model** | RFD-2000X-H  
**Detection Range** | 98.5ft (30m) for n-Heptane fire  
 15ft(4.5m) for Hydrogen fire (30 inch plume)  
**Field Of View** | H90° V90°  
**Operating Temperature Range** | -40°C to +75°C  
**Humidity Range** | Up to 95% relative humidity

**Enclosure Material** | SUS 316  
**Dimension** | W134 H117 D120mm  
**Weight** | 3.2kg  
**Response** | Typically 5 seconds

### ELECTRICAL SPECIFICATION

**Operating Voltage** | 24 VDC (17 VDC to 32 VDC)  
**Power Consumption** | 1.8W maximum at 32VDC  
**Output** | Relay Contacts (Fire, Fault, Warning Alarm)  
 4-20mA Current Output  
 RS-485 Proprietary Communication  
**Conduit Entry Size** | 2 x 1/2" NPT, M20 X 1.5 inch

### APPROVALS

**Performance** | FM3260  
**Explosion-Proof** | FM Class I Division 1 Groups B, C and D Class II Division 1 Groups E, F and G Class III, ATEX Ex db IIB + H2, T6  
**Protection** | IP67, NEMA Type 4X

# TEST LAMP & ACCESSORIES

## FLAME DETECTOR TESTER

Rezontech test lamp produces a particular frequency of IR and UV radiation to exclusively test Rezontech flame detectors within 30 seconds. Rezontech test lamp is proper to use in hazardous areas because it can make the flame detector tested without the needs of an actual fire.

## PRODUCTS

### TL-3000

- Operation Distance | 3m (Max. 5m)
- Target Model | RFD-3000 and RFD-3000X
- Operation Time | Max. 3.5 hours
- Dimension & Weight | About 3.2kg / 250mm X 145mm
- Enclosure | Aluminium (Anodizing Process)
- Temperature Range | Operating : 0°C to 50°C  
Storage : -10°C to 60°C






### TL-205

- Operation Distance | 3m (Max. 5m)
- Target Model | UV/IR flame detector
- Operation Time | Max. 2hours
- Dimension & Weight | About 3.2kg / 250mm X 145mm
- Enclosure | Aluminium (Anodizing Process)
- Temperature Range | Operating : 0°C to 50°C  
Storage : -10°C to 60°C



# PRODUCT LINE-UP

| Category                       | Model Name  | Specification |       |               | Photos  | Approvals         |                                      |
|--------------------------------|-------------|---------------|-------|---------------|---|-------------------|--------------------------------------|
|                                |             | Type          | Range | Field of View |   | Performance       | Explosion Proof                      |
| FM Approvals<br>Flame Detector | RFD-2000    | UV / IR       | 30m   | 90°           |    | FM                | -                                    |
|                                | RFD-2000X   | UV / IR       | 30m   | 90°           |    | FM                | FM<br>ATEX<br>IECEX                  |
|                                | RFD-2000X-H | UV / IR       | 30m   | 90°           |    | FM                | FM<br>ATEX                           |
|                                | RFD-3000X   | IR3           | 60m   | 90°           |    | FM<br>CCCF<br>KFI | IECEX<br>FM, ATEX<br>NEPSI<br>(CNEX) |
|                                | RFD-3000    | IR3           | 60m   | 90°           |   | FM<br>CCCF        | -                                    |
| KFI Approved<br>Flame Detector | RFD-2FTN    | UV / IR       | 30m   | 100°          |  | CCCF<br>KFI       | ATEX<br>NEPSI<br>EX-GOST             |
|                                | RFD-2TN     | UV / IR       | 30m   | 100°          |  | KFI               | -                                    |
|                                | RFD-3FT     | IR3           | 50m   | 90°           |  | KFI               | KGS                                  |
|                                | RFD-3T      | IR3           | 50m   | 90°           |  | KFI               | -                                    |

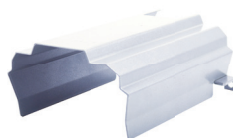
# ACCESSORIES



BK-01



BK-02



RSC-05



RSC-02

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