



Flame Detector Manufacturer  
**Mekasentron Inc.**

# FLAME DETECTORS

**Since 2003**, **Mekasentron Inc** designs and manufactures flame detector products. It became the first company in Korea to localize the production of flame detectors. We are constantly developing through the acquisition of various internationally qualified approvals, including the Korea domestic approval and global certification, as well as the FM approval, CCCF, IECEX, ATEX and NEPSI.

[overseas@mekasentron.com](mailto:overseas@mekasentron.com)





# UV/IR FLAME DETECTOR

The new **UV/IR Flame detector** series designs are the highest performance, cost effective flame detectors currently on the market. The new **UX150** Flame Detectors from Mekasentron provide the most comprehensive protection against **hydrocarbon-based fuel and hydrogen fires**, hydroxyl and hydrogen fires, as well as metal and inorganic fires. The detectors provide early warning of fires at long distances with high immunity to false alarms.

These Flame Detectors are approved and certified by a variety of third party agencies, including **FM, IECEx, ATEX, NEPSI, KGS and KFI**. These approvals and certifications assure our customers that we are the world-class flame detector manufacture and carry only the highest quality of products and performance.



## **[Benefits]**

Explosion-proof, db IIB H2 Gb (T6) : Suitable for hazardous locations

Immune Sunlight, Lamp, Arc Welding and Hot plate

Adjustable Swivel Mount

RS485 Communication : Non-isolation output (2 wiring), 9600bps.

Water and Dust Tight, EMC Protected

Early fire detection within 5 seconds, **Explosion Proof**, False Alarm immunity

For indoor and outdoor use and easy installation

## **[Applications]**

- Oil & Gas Station, Petrochemical Plant, Aircraft Hangers
- Power Station, Semi-conductor, Chemical Facilities, Ship
- Historical Site and so on

# Ultraviolet and Infrared (UV/IR)

## FM Approvals Hydrogen Flame Detector



### [Specification]

High Sensitivity UV and IR detectors

Detection Range : 15M@n-Heptane, 8M@Hydrogen

Response Time: < 5 sec

Field of View: 90 degrees horizontal and vertical

Operating Temperature: -40°C to +75°C

Humidity : Up to 95%

IP Rating: IP66

Material : Aluminum

Voltage Range: 18 – 30 VDC

Power Consumption: Normal Average 100mA / Max  
3W (@24VDC)

Relative Humidity: 0-95%

Weight : 1.4kg

### [Certifications/Approvals]

FM3260, IECEx, KFI, KGS, ATEX, NEPSI, CCCF(waiting)



# Ultraviolet and Infrared (UV/IR) Ex-Proof Flame Detector

## [Specification]

High Sensitivity UV and IR detectors

Detection Range : 30M@n-Heptane

Response Time: < 5 sec

Field of View: 90 degrees horizontal and vertical

Operating Temperature: -40°C to +75°C

Humidity : Up to 95%

IP Rating: IP66

Material : Aluminum

Voltage Range: 18 – 30 VDC

Power Consumption: NormalAverage 100mA / Max 3W (@24VDC)

Relative Humidity: 0-95%

Weight : 1.4kg



## [Certifications/Approvals]

IECEX, KFI, KGS, ATEX, NEPSI



# IR3 Flame Detector

Our **IR3** series range includes the **IR3 Flame Detectors**. These detectors offer a lower cost, lower power, compact design in a general purpose. **RX500** of the IR3 Flame Detector is approved for installations in hazardous areas. All of the Mekasentron flame detectors are ideal for indoor and outdoor applications in locations such as transport terminals, storage areas, industrial facility and historical and cultural sites with large open areas, providing an efficient alternative smoke and heat detectors often prove to be ineffective.

The IR3 Flame Detectors are approved and certified by a variety of third party agencies, including **FM, IECEx, ATEX, CCCF, NEPSI, KGS and KFI..**



## [Benefits]

Explosion-proof, db IIB H2 Gb (T6) : Suitable for hazardous locations

Immune Sunlight, Lamp, Arc Welding and Hot plate

Field of View of up to 90degrees horizontal (up to 120degrees horizontal in self-check result)

180 degrees Adjustable Swivel Mount

RS485 Communication : Non-isolation output (2 wiring), 9600bps.

BIT (Built-In-Test)

Water and Dust Tight, Excellent immunity to false sources

Suitable for indoor and outdoor areas, Optical self-test, Low power consumption

Multi Spectrum Design - for long distance detection

## [Applications]

Pipelines, Warehouses, Chemical plants, Printing industry, Aircraft hangers, Aerospace industry, Storage tank farms, Automotive industry, Power generation facilities, Onshore oil and gas installations, Offshore oil and gas installations., malls, wood stores, underground tunnels, arc welding workshops

## Triple IR (IR3)

## FM Approvals Flame Detector



### [Specification]

High Sensitivity Triple Infrared(IR3) detectors

Response Time: < 5 sec (60 meter far)

Field of View: 90 degrees horizontal / 90 degrees vertical

( an extra wide field of view up to 120° )

Operating Temperature: -40°C to +75°C

IP Rating: IP66

Material : Aluminum

Voltage Range: 18 – 30 VDC

Power Consumption: NormalAverage 100mA / Max 3W

(@24VDC)

Relative Humidity: 0-95%

EMC Protected

Fire and Fault Relays

False Alarm immunity

Weight : 1.4kg

### [Certifications/Approvals]

FM3260, IECEx, KFI, KGS, ATEX, NEPSI



# Triple IR (IR3) Flame Detector

## Ex-Proof Flame Detector

### [Specification]

High Sensitivity Triple Infrared(IR3) detectors

Detects fire at distances up to 60Meters

Field of View: 90 degrees horizontal / 90 degrees vertical

( an extra wide field of view up to 120° )

Operating Temperature: -40°C to +75°C

IP Rating: IP66

Material : Aluminum

Voltage Range: 18 – 30 VDC

Power Consumption: NormalAverage 100mA / Max 3W  
(@24VDC)

Relative Humidity: 0-95%

EMC Protected

Fire and Fault Relays

False Alarm immunity

Weight : 1.4kg



### [Certifications/Approvals]

IECEX, KFI, KGS, ATEX, NEPSI





# ACCESSORIES

## **Power Supply ME-03 / ME-04(3A/5A)**



- Dimension : 250\*300\*70(mm)
- Input Power : 220V
- Output Voltage : 24V
- Material : 1.0mm steel
- Rated Current : 3A/ 5A

## **Test Lamp TLX300**

**(For both UV/IR& IR3, Ex-proof Type)**

- Explosion Proof : EX d IIB, T6, IP65 (KGS)
- Dimension : 13 x 15 x 23 cm
- Operating Distance : Max. 5m  
(Distance may vary depends on the model)
- Operating Time : Max. 100minutes
- Weight : 3Kg
- Material : Aluminium



## **Test Lamp TLS300**

**(Both UV/IR& IR3 Types are useful)**



- Dimension : 12 x 13 x 20 cm
- Operating Distance : Max. 5m  
(It may vary depends on the model)
- Operating Time : Max. 100minutes
- Weight : less than 1Kg
- Material : SUS

**Bracket MB-01**

- **Adjustable Angle :**  
Horizontal & Vertical 180 degrees each
- **Material :** Aluminium
- **Color :** RED
- **Weight :** 0.3Kg
- **Dimension :** 94 x 151 x 250mm

**Sun Shield MS-01**

- **Material :** SUS
- **Weight :** 0.746Kg
- **Usage :** This is the kind of a sun visor, it will protect the detector from Sunlight and rain in outside.

**Air Shield/Air Jet (MA-01/MA-02)**

- Continuously spray into flame detector window and keep the windows clean.
- Suitable installing at contaminated areas such as dust or greasy places.



- Periodically spray into flame detector window and keep the windows clean.
- Suitable installing at contaminated areas such as dust.



# WE SPECIALIZE IN MANUFACTURING FLAME DETECTORS!



Flame Detector Manufacturer **Since 2003**

## Mekasentron Inc.

### **Mekasentron Inc.**

(ZIP : 13229) #307, 464, Dunchon-daero, Jungwon-gu,  
Seongnam-si, Gyeonggi-do, Korea

T +82 (31) 7319418

F +82 (31) 7319417

[overseas@mekasentron.com](mailto:overseas@mekasentron.com)

[www.mekasentron.com](http://www.mekasentron.com)