



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.

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UV/IR FLAME DETECTOR

A fire produces smoke, heat, flame and etc. The flame detector analyzes sensory inputs from Ultraviolet & Infrared light sources with flickering effect within.

These UV/IR threshold signals are compared to detect fire and minimizes false alarm.

Especially, MEKASENTRON's UX150 flame detector monitors hydrocarbon-based fuel and hydrogen fires.

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 carry only the highest quality of products and performance.



[Benefits]

Explosion-proof Type : 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

Fire and Fault Relays

False Alarm immunity

Indoor and outdoor usage

[Applications]

- Detects Hydrogen and Hydrocarbon based flames also
- Suitable for hazardous areas such as Oil, Gas stations and Petrochemical plants
- Electrical Substation, Semiconductor equipment, Petroleum Storage Tanks
- Hydrogen Charging Station and any place that use hydrogen

Ultraviolet and Infrared (UV/IR) FM Approvals Flame Detector



[Specification]

High Sensitivity UV and IR detectors

Detection Range : 15M

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: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

Power Consumption: Normal Average 100mA /

Max 3W (@24VDC)

Relative Humidity: 0-95%

Weight (with swivel) : 1.4kg

Warranty: 1 year

[Certifications/Approvals]

FM3260, IECEX, KFI, KGS, ATEX, NEPSI



Ultraviolet and Infrared (UV/IR) Flame Detector

[Specification]

High Sensitivity UV and IR detectors

Detection Range : 30M

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: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

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

Relative Humidity: 0-95%

Weight (with swivel) : 1.4kg

Warranty: 1 year



[Certifications/Approvals]

IECEX, KFI, KGS, ATEX, NEPSI



Ultraviolet and Infrared (UV/IR)

FM Approvals HYDROGEN Flame Detector



[Specification]

High Sensitivity UV and IR detectors

Detection Range : 15M

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: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

Power Consumption: Normal Average 100mA /

Max 3W (@24VDC)

Relative Humidity: 0-95%

Weight (with swivel) : 1.4kg

Warranty: 1 year

[Certifications/Approvals]

FM3260, IECEx, KFI, KGS, ATEX, NEPSI



Ultraviolet and Infrared (UV/IR) HYDROGEN Flame Detector

[Specification]

High Sensitivity UV and IR detectors

Detection Range : 30M

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: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

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

Relative Humidity: 0-95%

Weight (with swivel) : 1.4kg

Warranty: 1 year



[Certifications/Approvals]

IECEX, KFI, KGS, ATEX, NEPSI



TRILPE IR FLAME DETECTOR

A fire produces smoke, heat, flame and etc. The flame detector analyzes sensory inputs from Infrared light sources with flickering effect within.

This product RX500 is kind of the IR3, the three specific wavelength bands within the Infrared spectral region are algorithmically analyzed.

The IR3 Flame Detectors are approved and certified by a variety of third party agencies, including **FM, IECEX, ATEX, CCC, NEPSI, EAC, KGS and KFI**. These approvals and certifications assure our customers that we carry only the highest quality of products and performance.



[Benefits]

Explosion-proof Type : Suitable for hazardous locations

Immune Sunlight, Lamp, Arc Welding and Hot plate

Field of View of up to 120 degrees horizontal

180 degrees Adjustable Swivel Mount

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

BIT (Built-In-Test)

Water and Dust Tight

Indoor and outdoor usage

[Applications]

High-rise building, Government office, Gymnasium, 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 and vertical
(an extra wide field of view up to 120°)

Operating Temperature: -40°C to +75°C

IP Rating: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

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

Relative Humidity: 0-95%

EMC Protected

Fire and Fault Relays

False Alarm immunity

Weight (with swivel) : 1.4kg

Warranty: 1 year

[Certifications/Approvals]

FM3260, IECEx, KFI, KGS, ATEX, CCC, NEPSI, EAC



Triple IR (IR3)

Ex-Proof Flame Detector

[Specification]

High Sensitivity Triple Infrared (IR3) detectors

Detection Range : 50M

Field of View: 90 degrees horizontal and vertical

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

Operating Temperature: -40°C to +75°C

IP Rating: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db

(ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

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

Relative Humidity: 0-95%

EMC Protected

Fire and Fault Relays

False Alarm immunity

Weight (with swivel) : 1.4kg

Warranty: 1 year



[Certifications/Approvals]

IECEX, KFI, KGS, ATEX, NEPSI



Triple IR (IR3)

HYDROGEN Flame Detector

[Specification]

High Sensitivity Triple Infrared (IR3) detectors

Detection Range : 30M

Field of View: 90 degrees horizontal and vertical

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

Operating Temperature: -40°C to +75°C

IP Rating: IP66/67

Ex db IIB+H2 T6 Gb (IECEX)

Ex db IIC T6 T6 Gb, Ex tb IIIC T85°C Db (ATEX)

Material : Aluminum / SUS

Voltage Range: 18 – 30 VDC

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

Relative Humidity: 0-95%

EMC Protected

Fire and Fault Relays

False Alarm immunity

Weight (with swivel) : 1.4kg

Warranty: 1 year



[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. 10m
(Distance may vary depends on the model)
- **Operating Time** : Max. 100minutes



Test Lamp TLS300

(Both UV/IR & IR3 Types are useful)



- **Dimension** : 12 x 13 x 20 cm
- **Operating Distance** : Max. 10m
(It may vary depends on the model)
- **Operating Time** : Max. 100minutes
- **Weight** : 0.9Kg
- **Material** : SUS

Bracket MB-01

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

Sun Shield MS-01

- **Material** : SUS
- **Weight** : 0.76Kg
- **Usage** : This is the kind of a sun visor, it will protect the detector from Sunlight and rain in outside.

**Air-Shield**

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

Air-Jet

- 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**

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