



FX-20EX UV/IR Flame Detector

FEATURES & BENEFITS



- **UV / IR Spectrum** – for medium distance detection and high false alarm immunity
- **Compact & lightweight design**
- **Enclosures: (options)**
 - Aluminium
 - Stainless Steel(ST 316L): for offshore Facilities
- **User Selectable**(Sensitivity/Functions)
- **Multiple output options**
 - Relays for Alarm and fault
 - 0-20mA(steped)
 - RS-485 / RS-232 spectrum monitoring
- **Ex cable gland / 1-meter cable assembled**

The new FX-20EX UV/IR Flame detector detects fuel and gas fires at long distances with the highest immunity to false alarms.

The FX-20EX UV/IR can detect a 0.1m² gasoline pan fire at 30m in less than 5 sec.

Its new features include RS484/432 compatibilities for digital communications; and a compact, lighter design.

► Application

Offshore Oil & Gas Installations
Onshore Oil & Gas Installations and pipelines
Petrochemical plants
Chemical plants
Shipbuilding facility
Automotive industry

Storage tank farms
Power generation facility
Petrochemical plants
Airports & Aircraft Hangers
Warehouse & Painting industry
Waste disposal facility
Explosive & Munitions



GENERAL SPECIFICATIONS		Spectrum Response UV/IR (Dual Bands)		
Spectrum Response (At highest sensitivity setting for 0.1m ² pan fire)	Fuel n-Heptane Gasoline Diesel LPG 0.5m high / 0.2m width plume fire	Distance 30m 30m 20m 20m	Fuel Ethanal IPA (isopropyl Alcohol) Methanol	Distance 20m 25m 20m
Response Time	Typically 5 Seconds			
Adjustable Time delay	Up to 20 Seconds			
Sensitivity Range	4 Sensitivity ranges for 0.1 sq-m n-Heptane pan fire from 15m to 65m			
Field View	Horizontal 90°, Vertical 90°			
Built-in-Test	Manual (optional Automatic)			
Temperature Range	Operating/storage: -40°C to 75°C			
Humidity	Up to 95% non-condensing			

ELECTRICAL SPECIFICATIONS	
Operating Voltage	24VDC nominal (17-31VDC)
Power consumption	Standby: max 35mA Alarm: max. 75mA
Cable Entry	1xM20(ISO)
Wiring	AWG 16-26(Str 1.5mm ² to 0.13mm ²)
Electromagnetic Compatibility	EMI/RFI protected to EN61000 series
Electrical Interface	The detector includes twelve(12) terminals with four(4) wiring options

OUTPUTS				
0-20mA	Fault:	0 + 1mA	Bit Fault:	2mA± 10%
Non-isolated "source"	Normal:	4mA± 10%	Warning:	16mA± 10%
Configuration	Alarm:	20mA± 10%	Resistance Loop:	Max. 800Ω
Relays	Alarm, Fault SPST volt-free contacts rated 5A at 30VDC or 250VAC			
RS-485 (option)	RS-485 Modbus compatible communication link that can be used in computer controlled installations			
RS-232C(option)	Three IR channels spectrum monitoring with PC			

MECHANICAL SPECIFICATIONS	
Materials	Heavy duty copper free aluminium (less than 1%) with bright grey anodizing finish
Enclosure options	Stainless steel 316L with Electro polish finish
Mounting (Tilt Mount)	Heavy duty copper free aluminium (less than 1%) with bright grey anodizing finish
Options	Stainless steel 316L with Electro polish finish
Dimensions	31x23x11 cms
Weight	2.2kg – Aluminium 3.6 kg- Stainless steel
IP Rating	IP66 and IP67 as per EN60529