Maximum choice of features in a high performance package

**FEATURES & BENEFITS**

- UV/IR Dual-Sensor
- High-Speed Response - 150 msec Response to Saturated Signal
- Solar blind
- Automatic Built-In-Test (BIT)* and Manual - to assure continued reliable operation
- Heated window - for operation in harsh weather conditions (snow, ice, condensation)
- Multiple output options for maximum flexibility and compatibility
  - Relays (3) for Alarm, Fault and Auxiliary
  - 0-20mA (stepped)
  - HART Protocol for maintenance and asset management
  - RS-485, Modbus Compatible
- High Reliability - MTBF - minimum 150,000 hours
- Approved to Safety Integrity Level 2 (SIL2 – TUV)
  - Models 40/40LB and 40/40L4B only
- 5-Year Warranty
- User Programmable via HART or RS-485
- Ex approved for Zone 1 hazardous area location
  - ATEX
  - IECEx
  - FM/FMC
  - CSA
- 3rd party Performance Tested
  - EN54-10 (LPCB)
  - FM3260 (FM)

*option

**APPLICATIONS** (model dependent)

- Offshore Oil & Gas installations
- Onshore Oil & Gas installations and pipelines
- Chemical plants
- Petrochemicals plants
- Storage Tank farms
- Aircraft hangars
- Power Generation facilities
- Pharmaceutical Industry
- Printing Industry
- Warehouses
- Automotive Industry
- Explosives & Munitions
- Waste Disposal facilities
- Aerospace Industry
- Paint, Polymer and Glue processes

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Keep a SharpEye on your safety
Relays
Alarm, Fault and Auxiliary
SPST volt-free contacts rated 5A at 30 VDC or 250 VAC.

0-20mA (stepped)
Sink (source option) configuration
Fault: 0 +1mA IR:   8mA ± 5%
Option: 0-20mA IR:  ± 5%
Storage: 0-20mA IR:  ± 5%

HART Protocol
Optional HART communications on the 0-20mA analog current (FSK) - used for maintenance, configuration changes and asset management, available in mA source output wiring options

Electrical Interface
The detector includes twelve (12) terminals with five (5) wiring options (factory set)

General Specifications

Spectral Response
40/40L-LB: UV: 0.185 - 0.260 μm; IR: 2.5-3.0 μm
40/40L4-L4B: UV: 0.185 - 0.260 μm; IR: 4.4-4.8 μm

Detection Range
(at highest Sensitivity Setting for 1ft² (0.1m²) pan fire)

Fuel ft / m
n-Heptane 25 / 7.5
Gasoline 50 / 15
Ethanol 95%
Methanol 25 / 7.5
Polypropylene Pellets 13 / 4
IPA (Isopropyl Alcohol) 25 / 7.5
Office Paper 16 / 5
JP5 37 / 11
Hydrogen* 18 / 5
Kerosene 37 / 11
Methane* 16 / 5

Response Time
Typically 5 seconds, High speed 150 msec response to saturated signal

Adjustable Time Delay
Up to 30 seconds

Sensitivity Ranges
1 ft² (0.1m²) n-heptane pan fire from 50 ft (15m)

Field of View
Horizontal 100°; Vertical 95°

Built-in-Test (BIT)
Automatic (and Manual)

Temperature Range
Operating: -67°F to +167°F (-55°C to +75°C)
Option: -67°F to +185°F (-55°C to +85°C)
Storage: -67°F to +185°F (-55°C to +85°C)

Humidity
Up to 95% non-condensing (withstands up to 100% RH for short periods)

Heated Optics
To eliminate condensation and icing on the window

Electrical Specifications

Operating Voltage
24 VDC nominal (18-32 VDC)

Power Consumption
Standby: Max. 90mA (110mA with heated window)
Alarm: Max. 130mA (150mA with heated window)

Cable Entries
2 x 3/4" - 14NPT conduits or 2 x M25 x 1.5 mm ISO

Electrical Input Protection
According to MIL-STD-1275B

Electromagnetic Compatibility
EMI/RFI protected to EN61326-3 and EN61000-6-3

Electrical Interface
The detector includes twelve (12) terminals with five (5) wiring options (factory set)

Outputs
Relays
Alarm, Fault and Auxiliary
SPST volt-free contacts rated 5A at 30 VDC or 250 VAC.

0-20mA (stepped)
Sink (source option) configuration
Fault: 0 +1mA IR:   8mA ± 5%
Option: 0-20mA IR:  ± 5%
Storage: 0-20mA IR:  ± 5%

HART Protocol
Optional HART communications on the 0-20mA analog current (FSK) - used for maintenance, configuration changes and asset management, available in mA source output wiring options

RS-485
RS-485 Modbus compatible communication link that can be used in computer controlled installations

Mechanical Specifications

Materials
- Stainless Steel 316L with electro polish finish
- Heavy duty copper free aluminum (less than 1%), red epoxy enamel finish

Mounting
Stainless Steel 316L with electro polish finish

Dimensions
Detector: 37 x 4.6" x 6.18" (101.6 x 117 x 157 mm)

Weight
Detector (St.St.) 6.1 lb (2.8 kg) Tilt mount 2.2 lb (1.0 kg)

Environmental Standards
Meets MIL-STD-810C for Humidity, Salt & Fog, Vibration, Mechanical Shock, High Temp, Low Temp

Water and Dust
IP66 and IP67 per EN60529, NEMA 250 6P

Approvals

Hazardous Area
ATEX and IECEx
Ex II 2 GD, Ex de IIC T5 (-55°C to +75°C)
Ex de IIC T4 (-55°C to +85°C)
Ex de IIC T3 (-55°C to +105°C)
Ex de IIC T2 (-55°C to +105°C)
Ex de IIC T1 (-55°C to +105°C)
Ex de IIC T1 (-55°C to +105°C)

FM/FMC/CSA
Class I Div. 1, Groups B, C & D
Class II/III Div. 1, Groups E, F & G

Performance
EN54-10 (LPCB) FM-3260 (FM)

Reliability
IEC61508 - SIL2 (TUV) - models 40/40LB and 40/40L4B only

Accessories

Fire Simulator
20/20-311
U-Bolt/Pole Mount
789260-2 (2" pole)
789260-1 (3" pole)
Mini Laptop Kit
Weather Protector
Air Shield

Laser Pointer: 777166 (Detector area coverage)

For more information view manual or website www.spectrex-inc.com

Specifications subject to changes