



SPECTREX INC.

SharpEye™ **FLAME DETECTOR** **“MINI” SERIES** **Model 20/20MPI**

Finally...

...a Low Cost,
High Performance,
High Reliability,
Long Distance...

**NEW IR3 Flame Detector
for INDOOR applications!!!**

The 20/20MPI is a low cost, high performance, compact Triple IR (IR3) Flame Detector in a lightweight polycarbonate housing. It retains all the benefits of IR3 technology - long distance detection (up to 140ft / 43m) along with the highest immunity to false alarms.

The IR3 detector, with its lightweight housing and low power consumption, is especially suited to indoor applications, such as airport terminals, train stations, storage areas, public buildings and many more.

MAIN FEATURES

Long distance Flame Detection (up to 140ft / 43m)

Large Field of View (100° horizontal / 90° vertical)

Highest immunity to false alarms

Output options (two models):

- Alarm and Fault relay outputs (4 wire)
- or
- Stepped mA output (3 wire source)

RS-485 Modbus Compatible

Automatic and Manual Built-In-Test (BIT)

3 Year Warranty

APPLICATIONS

- Airport terminals • Train stations and terminals •
- Storage areas • Archives • Malls • Hospitals •
- Car parking towers and garages • Public buildings •
- Banks • Historical Sites • Offices

SPECTREX INC.

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GENERAL SPECIFICATIONS

Spectral Response	Three IR Bands				
Detection Range *Highest sensitivity setting for 1 ft ² (0.1m ²) pan fire	n-Heptane	140 ft (43m)	:	Methanol	100 ft (30m)
	Gasoline	140 ft (43m)	:	IPA (Isopropyl Alcohol)	115 ft (35m)
	Diesel Fuel	100 ft (30m)	:	Methane*	40 ft (12m)
	JP5	100 ft (30m)	:	LPG (Propane)*	40 ft (12m)
	Kerosene	100 ft (30m)	:	Polypropylene Pellets	50 ft (15m)
	Alcohol (Ethanol)	100 ft (30m)	:	Office Paper	50 ft (15m)
					*20" (0.5m) long 8" (0.2m) width plume fire
Response Time	Typically 5 sec.				
Adjustable Time Delay	Up to 30 seconds				
Sensitivity Range	4 sensitivity ranges for 1 ft ² (0.1m ²) gasoline pan fire: 35 ft (11m) up to 140 ft (43m)				
Field of View	100° horizontal, 90° vertical				
Built-in-Test	Manual and Automatic BIT				
Temperature Range	Operating: -40°F (-40°C) to +160°F (+70°C)		:	Storage: -40°F (-40°C) to +160°F (+70°C)	
Humidity	Up to 95%				

ELECTRICAL SPECIFICATIONS

Power Supply	Operating Voltage: 18-32 VDC			
Power Consumption	20/20MPI-R at 24V DC:	Max. 15mA at Normal Max. 25mA at Alarm	20/20MPI-M at 24V DC:	Max. 16mA at Normal Max. 36mA at Alarm
Electrical Connection	M20 Gland Connection			
Electrical Input Protection	Per EN54-10			
Electromagnetic Compatibility	EMI/RFI protected CE Marked per EN50130-4			

OUTPUTS

20/20MPI-R	Relays	:	Alarm and Fault SPST volt-free contacts rated 2A at 30 VDC or 0.5A at 250 VAC Fault relay normally closed, Alarm Relay normally open		
20/20MPI-M	0-20mA	:	Source configuration	:	Warning: 16mA ±5%
		:	Fault: 0 +0.5mA	:	Alarm: 20mA ±5%
		:	BIT Fault: 2mA ±10%	:	Resistance Loop: 100-600 Ω
		:	Normal: 4mA ±10%	:	

MECHANICAL SPECIFICATIONS

Dimensions	4.7" dia x 2.9" (119mm x 74mm)
Weight	10.6 oz (300g)
Tilt Mount Weight	2.5 oz (70g)
Enclosure and Tilt Mount	Polycarbonate
Water and Dust	IP55

PERFORMANCE APPROVALS

FM3260	Approved
EN54-10 (CPD)	Pending

ACCESSORIES

Tilt Mount	768004 (included with each new detector)
Protective Cover	768005 (included with each new detector)
Fire Simulator	20/20-310