



Flame Detector Triple Ir

Fireguard's Triple IR flame detector delivers safety, security and performance—the protection you can trust! It reacts to the IR radiation found in hydrocarbon fires and is immune to hot body radiation, lightning, arc welding and sunlight.

Designed with three optical IR sensors, It will only alarm when inputs from the three IR wavelengths are satisfied. In addition, It is programmed with our unique Automatic Digital Zoom (ADZ) technology, so the data processed by the detector is the most precise and complete possible. The three IR sensors, our ADZ technology, the user selectable sensitivity and the time delay settings, extend detection range and provide unparalleled false alarm immunity.

Triple IR detector comes standard with an explosion-proof housing and adjustable swivel. You choose from analog, relay or digital output—just let us know your requirements!

Fireguard has engineered a superior and affordable, multi-spectrum IR flame detector that is simple to operate and maintain while delivering all the security and performance required for high-risk industrial installations!



Features

- Three IR sensors
- No external reflector
- Explosion-proof Class I, Division 1 certified
- Adjustable, no-tool swivel mount
- Proprietary Automatic Digital Zoom feature
- Connect indoors or out, directly or up to 2000 feet away
- Immune to sunlight, lightning and hot body radiation
- User programmable sensitivity and time delay settings
- Multi-coloured, high intensity LEDs
- Automatic testing of optical surfaces
- Field of view of up to 70 degrees
- Watchdog timer monitors internal electronics
- Multiple output configurations available
- CSA and FM certified

Benefits

- Increased reliability
- No reflector to corrode
- Install in hazardous locations
- Simplifies installation and alignment
- Outstanding false alarm immunity
- Flexible installation
- Limits false alarms
- Adapt to different locations, conditions and situations
- See detector status in the field
- Ensures proper operation
- Wider coverage per detector
- Continuous system diagnosis
- Connect a wide variety of equipment
- Engineered to the highest international standards

Flame Detector

Triple Ir

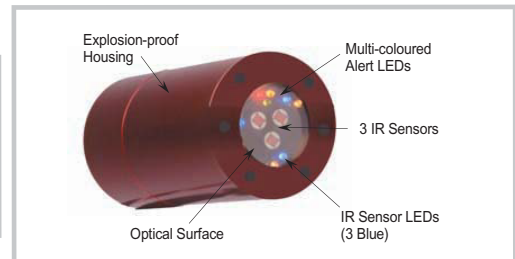
SPECIFICATIONS

PHOENIX	IR3S-A (ANALOG)	IR3S-R (RELAY)	IR3S-AD (ANALOG & DIGITAL)
Operating Voltage Range	10.5 to 32 V dc		
Power Consumption (at 24 V dc)	Nom 31 mA / 0.74 W Max 65 mA / 1.56 W	De-Energized - Nom 39 mA / 0.94 W - Max 73 mA / 1.75 W Energized - Nom 53 mA / 1.22 W - Max 86 mA / 2.06 W	Nom 31 mA / 0.74 W Max 65 mA / 1.56 W
Power Consumption (at 12 V dc)	Nom 46 mA / 0.55 W Max 114 mA / 1.37 W	De-Energized - Nom 66 mA / 0.79 W - Max 138 mA / 1.66 W Energized - Nom 93 mA / 1.12 W - Max 165 mA / 1.98 W	Nom 46 mA / 0.55 W Max 114 mA / 1.37 W
Operating Temperature Range	Certified -40°C to +75°C (-40F to +167F) / Operational -50°C to +75°C (-58F to +167F)		
Field of View	120 degrees vertical / 70 degrees horizontal at 50% of the on-axis detection distance		
Spectral Range	Spectral bands ranging from 4.0 to 5.0 microns		
Time Delay	Dip switch selectable to 0, 3, 5, 7 seconds		
Sensitivity Settings	Two adjustable settings via DIP switch (High / Low)		
Typical Response Time	<10 seconds		
Enclosure Material	Anodized aluminum (optional stainless steel) factory sealed housing		
Humidity Range	0 to 95% RH, non-condensing		
Weight (with swivel)	2.1 Kg/4.5 lb (Stainless Steel option 3.4 Kg/7.5 lb)		
Outputs	0 to 20 mA - Into a maximum loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 10.5 V dc. Isolated/Non-isolated loop supply.	Normally open/normally closed contacts rated 5 Amps at 30 V dc 125 V ac. Selectable energized /de-energized Fire relay. Fault relay fixed as energized. Both Fire and Fault relays fixed as non-latching and cannot be modified.	0 to 20 mA - Into a maximum loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 10.5 V dc. Isolated/Non-isolated loop supply. RS-485 RTU Modbus protocol.
Certifications	<p>CSA and NRTL/C certified for hazardous locations. Class I, Division 1, Groups B, C and D. Temperature code T5. Enclosure type NEMA 4X. Ex d II B+H2 T5 (Class I, Zone 1, Grp II B+H2 T5); or For Canada only: CSA certified for hazardous locations. Class I, Division 1, Groups A (Canada only – with special cementing), B, C and D. Temperature code T5. Enclosure type NEMA 4X. Ex d II B+H2 T5. CE Ex II 2 G, Ex d II B+H2 T5</p> <p>Factory Mutual (FM) flame detector performance certification</p>		

Note: Contact factory for Digital specifications.

PERFORMANCE

SUMMARY OF DISTANCES			IMMUNITY FALSE ALARM STIMULI	
Fuel	Fire Size	Distance	Stimuli	Immunity Range
n-heptane	1' x 1'	250 feet	-radio frequency interference	2 ft + total
gasoline	1' x 1'	180 feet	-indirect sunlight	20 ft +
methanol	1' x 1'	120 feet	-modulated/unmodulated heater	20 ft +
			-halogen, fluorescent, incandescent light	25 ft +
			-arc welding/sparking/arcing	30 ft +
			-lightning	total

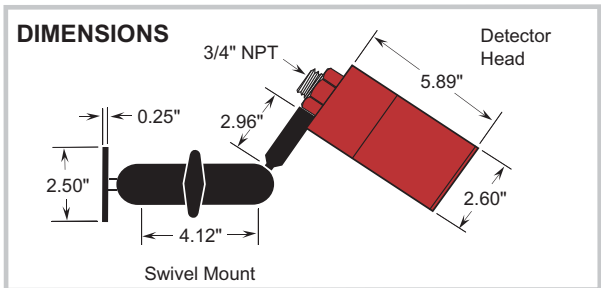


ORDERING INFORMATION

IR3S "S" SERIES FIRE DETECTOR	
IR3S-A	0 to 20 mA Analog output
IR3S-R	Fire and Fault alarm relays
IR3S-D	RS-485 MODBUS RTU protocol
IR3S-AD	0-20 mA analog output plus RS-485 MODBUS RTU protocol

ACCESSORIES

JB-IR3-A or JB-IR3-R	Separation Junction Box (NEMA 4X) c/w connector board, test jacks
JB-IR3-A-SS, JB-IR3-R-SS, or JB-IR3-AD-SS	Stainless Steel Separation Junction Box (NEMA 4X) c/w connector board, test jacks
LAT-120	Laser Alignment Tool



Warranty - 2 years electronics / 1 years sensors