

FLAME DETECTOR

ULTRA-VIOLET / INFRARED

SSMART SERIES

Net Safety's ultra-violet (UV), infrared (IR) flame detector delivers protection you can trust—the protection you need! The detector reacts to both the UV and IR radiation found in most fires, delivering accurate and reliable fire monitoring. As an added advantage, the UV/IRS does not react when exposed to arc welding, hot body radiation sources, lightning or sunlight. And, because two spectrums of radiation must be recognized and confirmed for the UV/IRS to initiate a fire condition, false alarms are virtually eliminated.

Enclosed in a rugged, explosion-proof housing, the UV/IRS uses the latest in microprocessor and UV/IR sensor technology. It is capable of stand-alone operation or can be connected to a variety of control devices to create a dependable fire monitoring system. The user can define sensitivity and time delay settings and the built-in testing routines ensure continuous operation.

The UV/IRS has a Field of View of up to 120 degrees and is available with analog or analog/relay output configurations for 12 or 24 V dc systems—just let us know your requirements!

Net Safety has once again engineered a cost effective, high-performance flame detector, ideal for even the most high-risk, industrial applications!



Features

- Two radiation sources necessary for alarm
- Field of view of up to 120 degrees
- Explosion-proof, Class I, Division 1 certified
- CSA, FM, and ATEX certified
- Connect indoors or out, directly or up to 2000 feet away
- Immune lightning, arc welding, sunlight and hot body radiation
- Adjustable, no-tool swivel mount
- User programmable sensitivity and time delay settings
- Multi-coloured, high intensity LEDs
- Manual and automatic testing of optical surfaces
- Watchdog timer monitors internal electronics
- Multiple output configurations available

Benefits

- Minimize false alarm events
- Wider coverage per detector
- Suitable hazardous locations
- Engineered to the highest international standards
- Flexible installation
- Limits false alarms caused by nearby activities
- Simplifies installation and alignment
- Adapt to different locations, conditions and activities
- See detector status in the field
- Allows maintenance scheduling by evaluating cleanliness
- Continuous system self-diagnosis
- Connect a wide variety of equipment

**Net Safety's flame detection systems safeguard lives,
protect capital investments and ensure uninterrupted production!**

ISO 9001:2000



www.net-safety.com

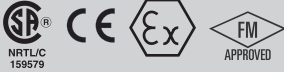
BCR-0005-00 002 May 2006

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SPECIFICATIONS

UV/IRS	"A" VERSION	"AR" VERSION
Operating Voltage Range	11.0 to 32 V dc	
Power Consumption (at 24 V dc)	Nominal (110 mA, 2.6 W), Maximum (200 mA, 4.8 W) *With heater - Nominal (135 mA, 3.24 W), Maximum (355 mA, 8.52 W)	Nominal (118 mA, 2.8 W), Maximum (200 mA, 4.8 W) *With heater - Nominal (135 mA, 3.24 W), Maximum (355 mA, 8.52 W)
Operating Temperature Range	Operational -50°C to +75°C (-58F to +167F) / Certified -40°C to +75°C (-40F to +167F)	
Spectral Range	UV Radiation 185 to 260 nanometres (1850 to 2600 angstroms)	IR Radiation in the 4.4 micron range
Time Delay	DIP switch selectable to 3, 4, 5 or 7 seconds	
Sensitivity Settings	DIP switch selectable to 8, 16, 24 or 32 counts per second	
Typical Response Time	<6 seconds depending on fuel source, fire size and distance	
Enclosure Material	Anodized aluminum (optional stainless steel) factory sealed housing	
Field of View	70 degrees horizontal / 120 degrees vertical	
Humidity Range	0 to 100% relative humidity, non-condensing	
Certifications	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 Factory Mutual (FM) flame detector performance certification	
Weight (with swivel)	2.1 Kg/4.5 lb (Stainless steel option 3.4Kg/7.5 lb)	
Outputs	0 to 20 mA - Into a maximum loop impedance of 800 Ohms at 32 V dc or 150 Ohms at 11.0 V dc. Non-isolated loop supply.	Form C contacts rated 1 Amp at 30 V dc, 0.5 Amp at 125 V ac. Selectable energized / de-energized, latching / non-latching Fire relay. Fault relay factory set as energized / non-latching and cannot be modified.

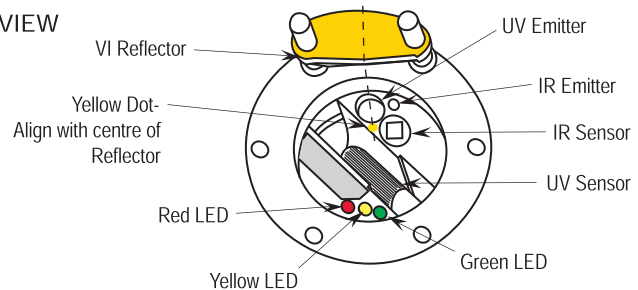


PERFORMANCE

SUMMARY OF DISTANCES

Fuel	Fire Size	Distance
n-heptane	1' x 1'	50 feet
methanol	1' x 1'	25 feet
diesel	1' x 1'	35 feet
jet fuel (JP4)	1' x 1'	45 feet
lube oil	1' x 1'	35 feet
propane	16" plume	50 feet
paper	2' x 2'	70 feet

FRONT VIEW



ORDERING INFORMATION

UV / IRS "S" SERIES FIRE DETECTOR

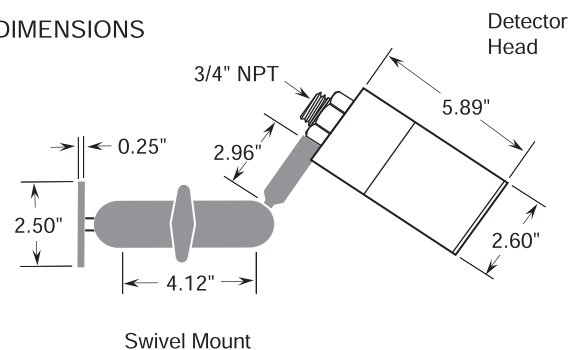
UV/IRS-A	0 to 20 mA Analog output
UV/IRS-AR	0 to 20 mA Analog output with a Fire and a Fault alarm relay

ACCESSORIES

JB-F-A	Junction box (NEMA 4 and 7CD) c/w connector board
JB-F-A-SS	Stainless steel Junction box (NEMA 4 and 7CD) c/w connector board
TL-UV/IR-KIT	Test Lamp Kit comes with Aluminum carrying case, charger, (2) 9.6 Volt battery pack and window cleaner. Weight - 2.0 Kg (4.4 lb)
LAT-120	Laser Alignment Tool Weight - 0.3 Kg (0.7 lb)
Air Shield	Air Shield (device to protect lens from dirt build up)

NOTE: Specify flammable source when ordering

DIMENSIONS



Warranty - 3 years electronics / 2 years sensors



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