

SINGLE UV FLAME DETECTOR

Ultra-Violet Detection Technology



- Manual and automatic testing of optical surfaces—monitors internal electronics

- Compact and lightweight for ease of installation

- Fully adjustable swivel mount is included

- 3 Year Electronics and 2 Year Sensor Warranty

- 120 Degree Field of View!

- User programmable sensitivity and time delay settings minimizes false alarm events

- Operating Range of -50°C to +75°C

- CSA, FM, ANSI/UL, ATEX, GOST-R and INMETRO Certified

Net Safety's Single UV (Ultra-violet) flame detector delivers high performance detection designed to meet the strict industry performance requirements. A precisely tuned spectrum of radiation must be recognized and confirmed by our advanced UV sensor to initiate a fire condition, yet it is immune to incandescent or fluorescent lighting, heaters or sunlight — so false alarms are considerably reduced. The Single UV is designed for simple installation and lower maintenance costs while delivering superior safety performance.

Enclosed in a rugged, explosion-proof housing, the Single UV uses the latest in modular microprocessor and UV sensor technology — delivering accurate and reliable monitoring for hydrocarbon and metal-based fires. It's 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 Single UV has a Field of View of up to 120 degrees and is available with analog or analog/relay output configurations for 12 or 24 VDC systems — just let us know your requirements!

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

SINGLE UV FLAME DETECTOR

"S" Series Ultra-violet Flame Detection

BCR-0012-00-011

SPECIFICATIONS

"A" VERSION

"AR" VERSION

Operating Voltage Range	10 to 32 Vdc	
Power Consumption (at 24 Vdc)	Nominal 32 mA / 0.768 W Maximum 64 mA / 1.54W	Nominal 51 mA / 1.23 W Maximum 82 mA / 1.97W
Operating Temperature Range	Certified -40°C to +75°C (-40°F to +167°F) / Operational -50°C to +75°C (-58°F to +167°F)	
Field of View	120 degrees horizontal / 95 degrees vertical	
Spectral Range	UV Radiation 185 to 260 nanometres (1850 to 2600 angstroms)	
Time Delay	DIP switch selectable to 0, 3, 5, 7 seconds	
Sensitivity Settings	DIP switch selectable to 8, 16, 24 or 32 counts per second	
Typical Response Time	<4 seconds depending on fuel source, fire size and distance	
Enclosure Material	Red powdercoat with clear anodizing, copper-free 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 11.0 V dc. Non-isolated loop supply	Form C contacts rated 1 Amp at 30 Vdc, 0.5 Amp at 125 Vac Selectable energized/de-energized, latching/non-latching Fire relay Fault relay factory set as energized/non-latching, cannot be modified
Certifications	CSA - Class I, Division 1, Groups B, C and D - Temperature code T5 - CANADA: Class 1, Zone 1, Ex d IIB + H2 T5 ANSI/UL - Class I, Division 1, Groups B, C and D - Temperature code T5 - UNITED STATES: Class 1, Zone 1, AEx d IIB + H2 T5 ATEX - EEx d II B+H2 T5 GOST-R - 1Ex d II BT5/H2 INMETRO - BR-Ex d II B+H2 T5 Factory Mutual (FM) 3260 Performance Certification NEMA Type 4X • IP66 - Enclosure ratings	
Warranty	3 Years Electronics / 2 Years Sensors	

PERFORMANCE

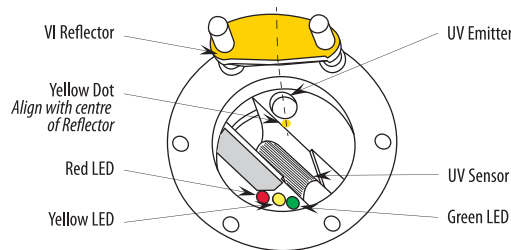
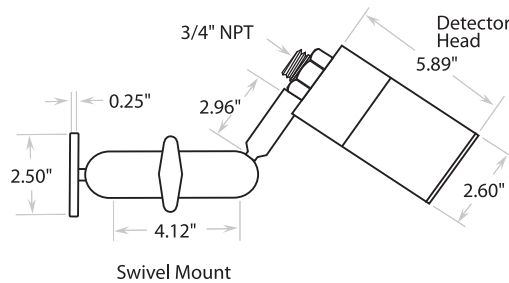
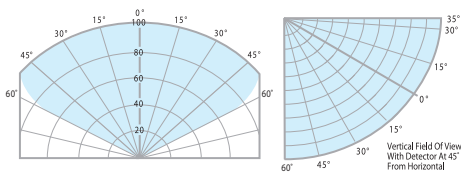
Summary of Distances

Fuel	Fire Size	Typical Response
n-heptane	1' x 1'	< 9sec @ 150 ft.
gasoline	1' x 1'	< 3sec @ 120 ft.
methane	36" plume	< 4sec @ 120 ft.

Immunity False Alarm Stimuli

Stimuli	Immunity Range
Direct/indirect sunlight	total
1500W heater	10 ft
halogen, incandescent light	3 ft
florescent light	10 ft

Field of View - Methane (32" plume - distances indicated in feet)



ORDERING INFORMATION

- UVS-A** 0 to 20 mA Analog output
- UVS-AR** 0 to 20 mA Analog output with a Fire and Fault alarm relay (includes junction box)
- OPTIONS** -X (ATEX), H- (Heated Optics), -SS (Stainless Steel)

NOTE: Specify flammable source when ordering

ACCESSORIES

- JB-MPS-A** - Junction Box (NEMA 4, IP67) c/w connector board (MVI switch) (Stainless Steel model available - JB-MPS-SS)
- JB-MPNS-A** - Junction Box (NEMA 4, IP67) c/w connector board (No MVI switch) (Stainless Steel model available - JB-MPNS-SS)
- TL-UV/IR-KIT** - Test Lamp Kit
- LAT-120** - Laser Alignment Tool.
- AIR-SHIELD** - Air Shield (device protects lens from dirt build-up)
- SSK-4** - Sunshade Kit

Changes are periodically made to the information within this document and incorporated without notice into subsequent revisions. Net Safety Monitoring Inc. assumes no responsibility for any errors that may be contained within this document. Please refer to manuals for complete specifications.

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