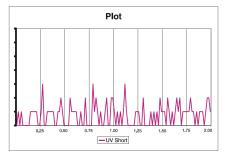
### **Applications Include**

- Warehouses
- Aircraft Hangars
- Petrochemical Facilities
- Gas turbines
- Power plants
- Silane and hydrogen gas storage





## **Features**

- ✓ Senses solar blind ultraviolet band
- ✓ SLR built in test for optical "through the lens" testing
- ✓ Utilizes long life ruggedized UV sensors
- ✓ Detects hydrocarbon and non-hydrocarbon based fires
- ✓ Wide field of view and solar blind
- ✓ Adjustable sensitivity with false alarm immunity
- ✓ Microcomputer based algorithms: FirePic, SnapShot, Tri-Mode Plot
- ✓ Wide temperature range of operation
- ✓ Compatible with standard approved fire alarm panels
- ✓ Explosion Proof housing
- ✓ Time programmable alarm verification
- ✓ Fire signature analysis

The Model SS4 represents the leading edge technology for UV optical flame detectors. This fire detector senses the radiant energy in the ultraviolet spectrum. The radiant emissions of flaming fires will alert the detector to their presence.

The field of view is the widest in the industry with a 120° cone of vision. This means each detector can cover more hazard area. The greater sensitivity also increases the volume covered by each detector to up to four times more than other detectors. Using sophisticated microcomputer signal processing algorithms false alarm rejection is maximized for a UV detector. For applications where UV sources, such as welding are present, the SS4-A multi-spectrum detector is recommended.

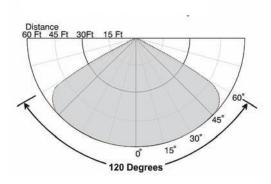
### Operation

The SS4 operates form standard 24V power and interfaces with all approved fire alarm panels. When power is applied a self-test is performed and the fault relay resets to show no faults. The detector then begins searching for the radiant energy patterns of a fire. The front LEDs light momentarily every ten seconds to indicate power is on. The UV spectral data stream of information from the twin UV sensors is analysed by the microcomputer. The microcomputer compares the data with fire signature and false alarm models. When the data from the sensor matches a fire signature model within certain parameters the detector declares an alarm. Upon alarm the detector activates the alarm relay and stores all of the pre-fire spectral data from the twin UV sensors in non-volatile memory for retrieval and evaluation. This FirePic data can be used to determine fire type, location and ignition source.

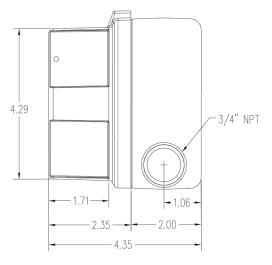
As part of the FS2000 System the complete optical path can also be checked using the COP-I Test Sources in the system. Connection into the FS2000 system is by the four wire RS-485 FireBus.

# Specification

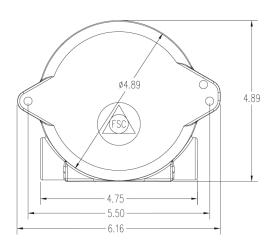
#### MAXIMUM SENSITIVITY



Field of view, horizontal and vertical



Model SS4-AUV - Side View



Model SS4-AUV - Back View

All dimensions in inches. This specification subject to change without prior notice

Sensitivity: Adjustable

1 sq. ft. gasoline fire at 60ft. down to 15ft.

within five seconds

Field of view: 120° cone of vision

Spectral sensitivity: Ultraviolet: 185 to 260 nanometers

Solar blind

Input power: 25Vdc nominal

34V maximum, 20.5VDC minimu 40mA normal operation, typical 50mA Fire condition, typical

Relay Outputs : Fire relay:

Latching/Non-Latching, switch selected

N.O. and N.C. contacts 0.5A at 120VAC, minimum

1.0A at 24VDC, resistive, maximum

Fault relay:

N.O. and N.C. contacts 0.5 A at 120VAC maximum

1.0 A at 24VDC, resistive, maximum

Temperature Range: Operation: -40°C to +85°C

Storage: -55° to +105° C

Physical data: Weight: 3.8lbs approx

Dimensions: 4.8" diameter

4.4" high

Housing: Copper free aluminium (less than 0.4%)

with powder coated finish.

**Explosion Proof:** 

Class I, Div. 1 & 2 Groups B, C, & D Class II, Div. 1 & 2, Groups E, F, & G

Class III

NEMA 3, 4 weather proof, tamper resistant

dual 3/4" NPT conduit openings

Warranty: One year from shipping date.

Extended warranty available