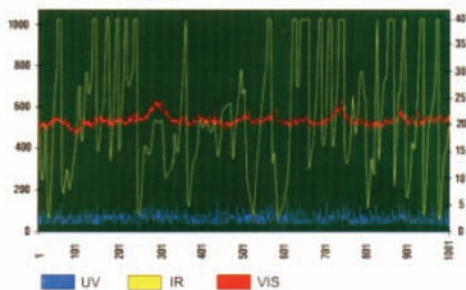


## Applications Include

- ✓ Munitions production
- ✓ Explosives production
- ✓ Manufacture of other explosive materials
- ✓ Silane and Hydrogen gas storage



Tri-Mode Plot Shown on Computer Display



## Operation

The SS2-AM and SS2-AML operate from standard 24 volt power and interfaces to 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 continuous spectral data stream of information from the sensor array is analysed by the microcomputer. The microcomputer compares the data with fire signature and false alarm models. When the data from the sensor array matches a fire signal 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 sensor array in non-volatile memory for retrieval and evaluation.

## Features

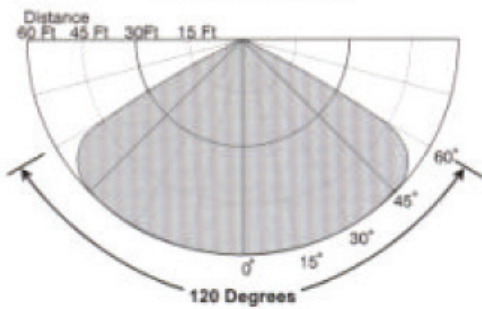
- ✓ Multi Spectrum™: Senses ultraviolet, visible and infrared bands
- ✓ Detects Hydrocarbon and non-hydrocarbon based fires and explosions
- ✓ Wide field of view and solar blind
- ✓ Greatest sensitivity with false alarm immunity
- ✓ Microcomputer based algorithms
- ✓ Wide temperature range of operation
- ✓ Explosion proof housing
- ✓ Proven in world wide applications
- ✓ Ultra high-speed response

The model SS2-AM and SS2-AML represent the leading edge technology for Ultra-High Speed response optical fire detectors, and when used as part of the FS2000 system it becomes a very powerful fire protection tool. This Multi-Spectrum™ optical flame detector senses radiant energy in the ultraviolet (UV), visible and infrared (IR) spectrums. The radiant signatures of all types of flaming fires will alert the detector to their presence.

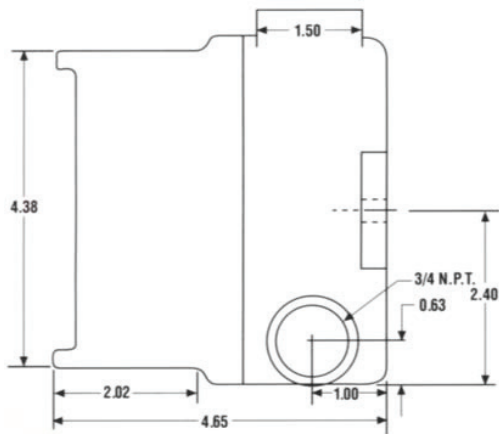
The field of view is the widest in the industry with a 120° cone of vision. This means each detector can cover more hazard area. The greater sensitivity also increases the volume covered by each detector, up to four time more than other detectors.

Using sophisticated microcomputer signal processing algorithms with the complete spectrum information false alarm rejection is virtually assured.

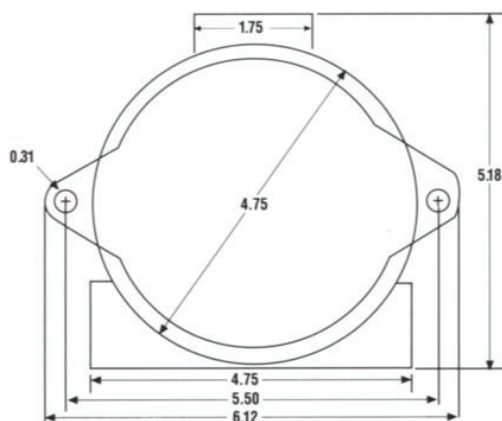
MAXIMUM SENSITIVITY



Field of view, horizontal and vertical



Model SS2 - Side View



Model SS2 - Back View

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

Sensitivity: 1 Sq Ft Gasoline fire at 60 feet within 5 seconds

Speed of Response: 3.9 milliseconds

Field of view: 120° cone of vision

Spectral sensitivity: Ultraviolet: 185 to 260 nanometers  
Infrared: 0.7 to 3.5 nanometers  
Visible: 400 to 700 nanometers

Input power: 24V DC nominal  
+10%/-15%  
56mA normal operation, typical  
68mA Fire condition, typical

Relay Outputs : Non Latching (SS2-AM)  
Latching (SS2-AML)  
N.O. and N.C. contacts  
0.5A at 120V AC Maximum  
1.0A at 24V DC, resistive, maximum

Fault relay:  
N.O. and N.C. contacts  
0.5A at 120V AC Maximum  
1.0A at 24V DC, resistive, maximum

Temperature Range: Operation: -40°C to +85°C  
Storage: -55°C to +105°C

Physical data : Weight: 3.8lb (approx)  
4.8 inch diameter by 4.4 inches 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