Fire Sentry SS2 Fire and Flame Detectors

Honeywell

SS2 UV/IR Flame Detector

Fire and Flame Detector

Fire Sentry SS2 Detector



Features

- Multi-Spectrum senses energy in the UV, Vis and WideBand IR™
- False alarm immunity
- Detects hydrocarbon and non-hydrocarbon fires
- Microprocessor based algorithms: FirePic™ and Tri-Mode Plot™
- Wide field of view and solar blind
- Wide temperature range of operation
- Explosion-proof housing
- FS2000™ System compatible or stand-alone operation
- Compatible with approved fire alarm panels

SS2-A & SS2-AN UV/IR Digital Fire and Flame Detector

- Oil, Gas & Petrochemical Facilities
- Gas Turbines
- Compressor Stations
- Power Plants
- Silane & Hydrogen Gas Storage
- Aircraft Hangers
- Warehouses

SS2-AM & SS2-AML UV/IR Ultra-High Speed Digital Fire and Flame Detector

- Munitions production
- Explosives production
- Manufacture of other explosive material
- Silane & Hydrogen gas storage

SS2-AH & SS2-AHD UV/IR Ultra-High Speed Digital Fire and Flame Detector

- Sodium Azide propellant manufacture
- Automotive Air Bag manufacture

SS2-A & SS2-AN Multi-Spectrum Digital Electro-Optical Fire Detector

Fire Sentry SS2-A and Fire Sentry SS2-AN

The Fire Sentry SS2-A, (latching Fire Alarm relay), and Fire Sentry SS2-AN (non-latching Fire Alarm relay), represent the world´s pre-eminent UV/IR technology for Electro-Optical fire and flame detectors, with thousands successfully operating in a multitude of installations worldwide. This detector senses radiant energy in the Ultraviolet (UV), Visible and Wide Band IR™ spectrum. The radiant energy from 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. Greater sensitivity also increases the volume of coverage by the detector, up to four times more than some other detectors.

Fire Sentry SS2-AM and Fire Sentry SS2-AML

The Fire Sentry SS2-AM, (latching Fire Alarm relay), and Fire Sentry SS2-AML (non-latching Fire Alarm relay), represent the world´s pre-eminent Ultra-High Speed UV/IR technology for Electro-Optical fire and flame detectors, successfully operating in a multitude of installations worldwide. This detector senses radiant energy in the Ultraviolet (UV), Visible and Wide Band IR™ spectrum. The radiant energy from 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 hazardous area.

*Fire Sentry Corporation Patents

Fire Sentry SS2 Detector



The field of view for the Fire Sentry SS4 detectors is the widest in the industry with a 120° cone of vision. This means more hazard area can be covered by each detector. Greater sensitivity also increases the volume covered by each detector, up to four times more than some other detectors.

Using sophisticated microprocessor signal processing algorithms, false alarm rejection is maximized – with virtual immunity to false alarms from arc welding, corona discharge and other common non-fire sources.

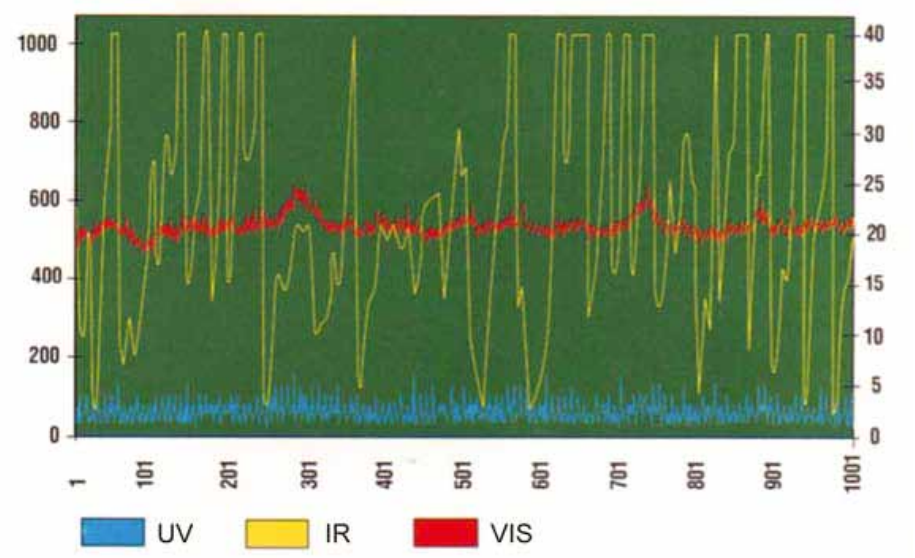
Operation

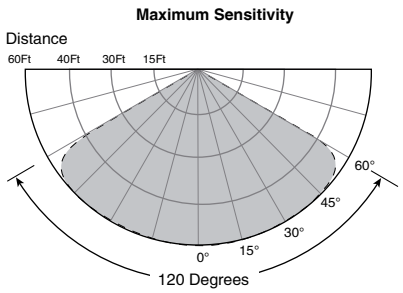
The SS2 operates from standard 24 Volt DC power and interfaces to approved fire alarm panels or standard PLC's. When power is applied, an internal self test is performed and the fault relay resets to show no faults. The detector is then in normal operation.

The front LEDs flash every ten seconds to indicate power is on. The continuous spectral data stream of information from the sensor array is analyzed by the microprocessor. On 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. This Fire Pic™ data can be used to postulate the cause of the fire.

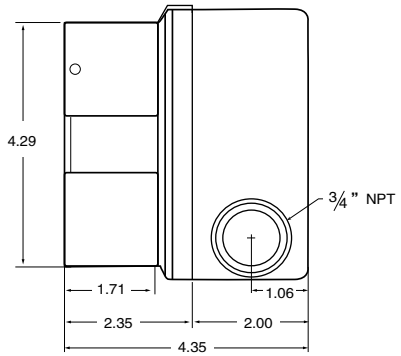
As part of the FS2000™ System, the the lens and complete optical path can be checked using COP-i™ Test Sources in the system. Connection into the FS2000™ System is by the four wire RS-485 FireBus™.

Tri-Mode Plot Shown on Computer Display

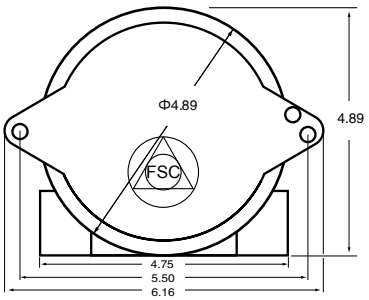




Field of View, Horizontal and Vertical Sensitivity to 1 sq. ft. Gasoline Pan Fire



Model SS2-Side View



Model SS2-Back View

SPECIFICATIONS

Response Time	2-5 seconds to 1 sq. ft. of gasoline pan Fire at 60 ft.
Field-of-View	120 degrees cone of vision (60 degrees from on axis).
Spectral Sensitivity	Ultraviolet: 185 to 260 nanometers Wide Band Infrared: 0.7 to 3.5 micrometers Visible: 400 to 700 nanometers
Input Power	24 VDC nominal (20.4 to 34 VDC)
Power	56 mA normal operation, typical
Consumption	75 mA alarm condition, typical
Relay Outputs	Fire Alarm Relay: NO & NC contacts Latching /Non-Latching, factory set Normally de-energized Fault Relay NO & NC contacts Normally energized Relay contact ratings: 0.5 A at 120 VAC, 1.0 A at 24 VDC
Operating Temperature	-40to + 185°F - 40 to + 85° C
Humidity Range	10 to 90% RH, non-condensing
Weight	4 pounds - Aluminum 7.5 pounds - Stainless Steel
Housing	Copper-free aluminum (less than 0.4%) powder coated NEMA4 IP66, tamper resistant with integral dual 3/4" NPT conduit openings Stainless steel housing available
Electrical Classification	Explosion-Proof Class I, Div. 1 & 2, Groups B, C, & D Class II, Div. 1 & 2, Groups E, F, & G Class III.
Mounting	Swivel bracket assembly
Warranty	Two years from factory shipping date Extended warranty available.

ORDERING INFORMATION

SS2-A	Electro-Optical Detector, latching
SS2-AN	Electro-Optical Detector, non-latching
SM4	Stainless Steel Swivel Mount
FT-2145	Explosion-proof Test Lamp
CM1-A	Wall-mount Controller

Customer business centre

Korea: +82-2-69090300
Singapore: +65-65803776
Australia: +61-3-94642770
Taiwan: +886-3-5169284
China: +86-21-28943293

Technical Services

AP: ha.ap.service@honeywell.com
EMEA: ha.emea.service@honeywell.com
US: ha.us.service@honeywell.com

www.honeywell.com

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