Fire Sentry SS4 Fire and Flame Detectors

Honeywell





UV and UV/IR Electro-Optical Digital Fire and Flame Detectors

Fire Sentry SS4 Detectors







Fire Sentry SS4-A and SS4-AS Features:

- Multi-SpectrumTM: senses ultraviolet, visible and Wide Band InfraredTM
- Built-in test for optical "through the lens" testing
- · False alarm immunity
- Detects hydrocarbon and nonhydrocarbon based fires
- Wide field-of-view and solar-blind
- Adjustable detector sensitivity
- Microprocessor based algorithms: FirePicTM, SnapshotTM and Tri-Mode PlotTM
- Wide temperature range of operation
- Compatible with standard approved fire alarm panels
- Explosion-proof housing
- Time programmable alarm verification

Fire Sentry SS4-AUV Features:

- Senses solar-blink ultraviolet band
- Built-in test for optical "through the lens" testing
- Utilizes long-life, ruggedized UV sensors
- Detects hydrocarbon and nonhydrocarbon based fires
- Wide field-of-view and solar-blind
- Adjustable detector sensitivity
- Microcomputer based algorithms: FirePicTM, SnapshotTM and UV Plot
- Wide temperature range of operation
- Compatible with standard approved fire alarm panels
- Explosion-proof housing
- Time programmable alarm verification

Applications include:

- Petrochemical Facilities and Refineries
- Co-Generation Plants
- Aircraft Hangars
- Silane and Hydrogen Gas Storage
- Gas Turbines & Power Plants
- Gas Compressor Stations
- Warehouses

The Fire Sentry SS4 Electro-Optical Digital Fire and Flame Detectors represent leading edge UV and UV/IR technology.

FireSentry SS4-A

The Fire Sentry SS4-A represents the world's pre-eminent UV/IR technology for Electro-Optical Flame Detectors with tens of thousands successfully operating in a multitude of installations worldwide. This multi-spectrum detector senses radiant energy in the ultraviolet (UV), visible and Wide Band Infrared™ (IR) spectrum. The radiant energy from all types of flaming fires will alert the detector to their presence.

To eliminate common nuisance false alarms that occasionally occur with UV-only, IR-only, Dual IR or Dual Mode UV/IR detectors, the Fire Sentry SS4 detectors' FireLogic signal processing requires that UV, visible and Wide Band IR radiant energy all be evaluated before declaring a fire. The smart detector utilizes real-time signal processing algorithms that are optimized to alarm on all types of fires, while virtually eliminating the possibility of false alarms.

Fire Sentry SS4-AS

The Fire Sentry SS4-AS processes UV, IR and Visible (VIS) spectral ranges from ruggedized solar-blind UV, "Quantum-Effect" IR and VIS sensors correspondingly. It is optimized for detection of hydrogen, ethanol, methanol and methane (natural gas) fires and like the other detectors in its family, it responds to Type A, B and C flaming fires.

Fire Sentry SS4-AUV

The Fire Sentry SS4-AUV represents the leading edge technology UV optical flame detectors. This flame detector senses radiant energy in the ultraviolet (UV) spectrum. The radiant emissions of flaming fires will alert the detector to their presence.



Fire Sentry SS4 Detectors







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.

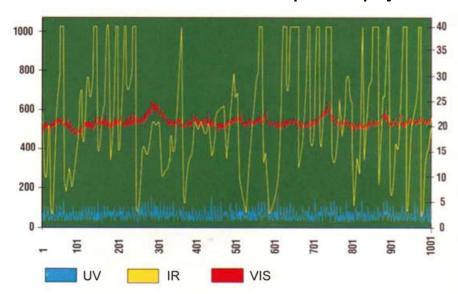
Operation

The Fire Sentry SS4 detectors operate from standard 24 Volt DC power and interfaces to approved fire alarm panels or standard PLC's. When power is applied, a self-test is performed and the fault relay resets to show no faults. The front LED lights 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. Upon alarm, the detector activates the alarm relay and stores all the pre-fire spectral data 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 SS4 family of detectors communicate with CM1-A Controller via a four wire bi-directional RS-485 FireBus[™].

Tri-Mode Plot Shown on Computer Display





Honeywell Analytics Lines of Business







Commercial

Gas detection from standalone units to fully engineered, multi-point systems, all offering cost-effective regulatory compliance

» Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

» Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial



Portables

Single or multi-gas Lumidor and other premium detectors with compact, lightweight designs ranging from simple alarm only units to advanced, fully configurable and serviceable instruments

» Applications: underground utility and electricity ducts, boiler rooms, post-fire sites, sewers, industrial plants, industrial hygiene, first responder teams, remote fleets



High Tech/Government

A complete portfolio of gas and chemical detection instrumentation including infrared spectroscopy (MST) with no cross interference, to Chemcassette paper-based solutions (MDA Scientific) offering detection down to parts per billion

» Applications: semiconductor manufacturing and nanotechnology, aerospace propulsion and safety, specialty chemicals industry, research laboratories, emergency response

Technical Services

24/7 global network includes post-sales service and Systems Integration teams

- » Emergency call out, service contracts, on/off-site repair, training and commissioning
- » Complete range of spares, consumables and accessories



While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.

Fire Sentry Corporation is now part of Honeywell Analytics. As we begin to fully integrate our companies, you might notice some small changes. This integration is about bringing together two of the best in life safety. We are focused on putting our customers first and making the right decisions to guarantee Honeywell Analytics continues to remain the experts in fire and gas safety.

