Fire Sentry SS4 Fire and Flame Detectors

Honeywell

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

Fire Sentry SS4-A and SS4-AS Features:

- Multi-Spectrum™: senses ultraviolet, visible and Wide Band Infrared™
- Built-in test for optical "through the lens" testing
- False alarm immunity
- Detects hydrocarbon and non-hydrocarbon based fires
- Wide field-of-view and solar-blind
- Adjustable detector sensitivity
- Microprocessor based algorithms: FirePic™, Snapshot™ and Tri-Mode Plot™
- 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 non-hydrocarbon based fires
- Wide field-of-view and solar-blind
- Adjustable detector sensitivity
- Microcomputer based algorithms: FirePic™, Snapshot™ 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.

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