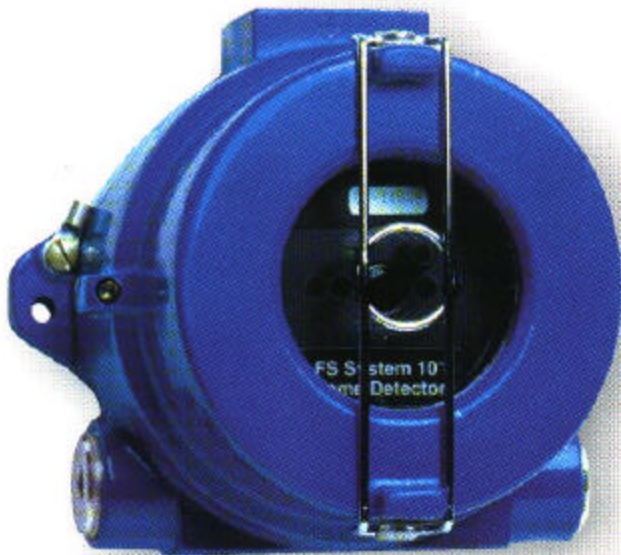


# FS System 10™ Fire Detection/Process Control For Automatic Electrostatic Paint Spray Booths

FS10



## FEATURES

- Multi-spectral digital electro-optical infrared flame detector
- Meets requirements of NFPA 33
- Unique two-stage ALERT and FIRE ALARM response
- Immune to false alarms caused by arcs or corona discharges
- Built-in automatic "through-the-lens" self-test
- **NOT** sensitive to background radiant energy sources such as paint heaters
- **NOT** affected by absorbing smoke or paint solvent mist in liquid paint spray booths
- **SEES** through paint, powder or oil residue on detector's lens
- Digital communications with RS-485 interface
- **FirePic™**: Retrieval of recorded pre-fire data
- **SnapShot™**: dynamic graphical display of *WHAT* detector sees

## APPLICATIONS (Indoor use only):

- Liquid Paint Spray Lines
- Powder Coating Booths
- Diesel Generators & Gas Compressor Stations
- Aerosol Filling
- Power Transformers
- Curing Ovens

Fire Sentry's fire detection systems have been protecting electrostatic paint spray booths worldwide, with millions of booth operational hours, and not a single fire loss.

A high-speed, microprocessor based Fire Detection and Process Control System specially designed for liquid and powder coating applications, the **FS System 10™** quickly detects the presence of a flame, reacts by initiating a shutdown of the electrostatic finishing process in a matter of milliseconds; and effectively interrupts the fire before residues and wet paint films can ignite.

The **FS System 10™** is the only system that provides a two-stage response, an **ALERT** for spray gun "fireball" type fires, and if the fire continues a **FIRE ALARM** is declared in 4-5 seconds.

The **FS System 10™** flame detector is vastly superior to conventional detectors due to the electro-optical quantum infrared sensor array, and the ability to accurately detect fires, without false alarms. **FS System 10™** is available in both Wall-mount Controller and Card Controller configurations. (For additional information on Card Controller, consult the factory.)

The detector is mounted in an explosion-proof housing. The wall-mounted controller is a self-contained system mounted in a NEMA 12 enclosure with LCD display and LED status lights. Three 10-amp mechanical relays have been incorporated for shutting down the paint flow, electrostatics and conveyor. Detector "History" and "Fault" files are reported in real-time and date, then stored in detector's non-volatile solid-state memory. FirePic™ and SnapShot™ data can be downloaded from the RS-232 port of the controller using a PC computer. The controller may operate with one or two detectors.

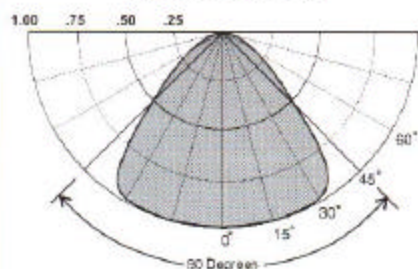


WORLD LEADER IN ELECTRO-OPTICAL FIRE DETECTION

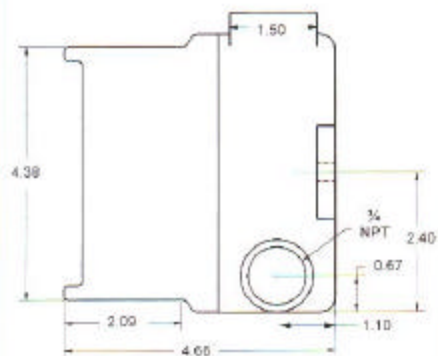
**FIRE SENTRY™ CORPORATION**



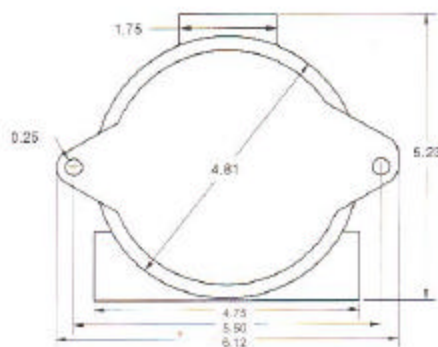
### Maximum Sensitivity



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



**Model FS10 - Side View**



**Model FS10 - Back View**

## SPECIFICATIONS - Wall-mount Controller

<b>Enclosure</b>	NEMA 12 wall-mount steel cabinet
<b>Displays &amp; Indications</b>	24 character back lighted LCD LED status lights Built-in piezo electric horn
<b>Input Power</b>	24 VDC nominal (18 to 28 VDC) 120 VAC with optional kit
<b>Power Consumption</b>	Normal: 200mA @ 24 VDC Alarm: 180mA @ 24 VDC
<b>Relay Outputs</b>	<b>Early Warning:</b> SPDT, De-energized <b>Alert:</b> SPDT, De-energized <b>Fire Alarm:</b> SPDT, De-energized <b>Fault:</b> SPDT, Energized <b>Process Control:</b> (3) SPDT, Energized Relay contact ratings: Process control: 10 amps @ 24 VDC All other relays: 1 amp @ 24 VDC Process control & fault relays are Energized, all other relays are De-energized during normal operation
<b>Operating Temperature</b>	+32 to +122 °F (0 to +50° C)
<b>Electrical Connection</b>	RS-485 interface via shielded four wire FireBus loop
<b>FirePic™</b>	6 total, each 8 seconds duration
<b>Event History</b>	200 total for both detectors
<b>Number of Detectors</b>	1 or 2 detectors per controller

## SPECIFICATIONS - Detector

<b>Sensitivity</b>	Standard sensitivity 15 ft. Optional 30 ft., or 45 ft. Sensitivity available. Please specify when ordering
<b>Response Time</b>	<b>Alert:</b> 0.3 seconds <b>Early Warning:</b> 0.5 seconds <b>Alarm:</b> 4 seconds
<b>Field of View</b>	90 degrees horizontal & vertical
<b>Weight</b>	3.8 lbs (1.7 Kg)
<b>Temp. Range</b>	- 40 to +185 °F (- 40 to +85 °C)
<b>Housing</b>	Copper free aluminum, powder coated finish, NEMA 4 Rated
<b>Electrical Classification</b>	Class I, Div 1 & 2, Group B, C, D,
<b>Spectral Sensitivity</b>	Near Band Infrared: 0.7 to 1.1 micrometers Wide Band Infrared: 0.7 to 3.5 micrometers Visible: 400 to 700 nanometers

## ORDERING INFORMATION

FS10-OPTION-1-GF	Wall-mount Controller with <b>two</b> detectors
FS10-OPTION-1S-GF	Wall-mount Controller with <b>one</b> detector
SM2	Heavy-duty Swivel-mount
FS-846	Test Lamp
DPC-12	Disposable protective cover
DASA 1-P	Airshield

## FIRE SENTRY CORPORATION

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