

## FAAST: Fire Alarm Aspiration Sensing Technology™

*FAAST aspirating smoke detectors deliver highly accurate Very Early Warning Fire Detection and extensive communications capabilities to provide maximum control over challenging environments.*



### Features

- Detection as precise as 0.00046 %/ft obscuration
- Five alarm levels and two sensitivity modes provide application flexibility
- Dual flow detection including both ultrasonic and electronic sensing for pipe and chamber air flow measurement
- A single device protects up to 8,000 square feet
- Advanced detection algorithms reject common nuisance conditions
- Patented particle separator and field-replaceable filter remove contaminants from the system
- PipelQ™ software provides intuitive system layout, configuration, and monitoring all in one package
- Onboard Ethernet interface enables remote monitoring and e-mail status updates
- Fault indicators exhibit a broad spectrum of events
- Unique air flow pendulum graph verifies pipe network functionality
- Particulate graph displays subtle environmental changes for early problem indications

### Agency Listings

SIGNALING



**The FAAST 8100 aspirating smoke detector** combines dual source (blue LED and infra-red laser) optical smoke detection with advanced algorithms to detect a wide range of fires while maintaining enhanced immunity to nuisance particulates. This enables FAAST to accurately detect incipient fire conditions as early as 30 to 60 minutes before a fire actually starts for Early Warning Fire Detection and Very Early Warning Fire Detection.

For initial system creation, the PipelQ\* software guides users through pipe layout. The software also provides intuitive control over system configuration and ongoing system monitoring. An installed device can be monitored through its integral display, from a computer connected to the device, or remotely through a computer browser or mobile device when the detector is connected to the Internet via its Ethernet port. When Internet-connected, FAAST can also e-mail status updates to appropriate personnel. The detector can communicate alarm levels, urgent and minor faults, and isolate inputs via eight form C relays.

To enable a full detection strategy, FAAST combines its advanced communications capabilities with an extensive range of customizable settings. The detector provides five alarm levels that can be programmed for latching or non-latching relays. To accommodate specific codes or environments, alarm delays can be set anywhere between 0 to 60 seconds. FAAST also supports two sensitivity modes: In Acclimate™ mode, the detector automatically adjusts itself to current environmental conditions to reduce nuisance alarms. Day/Night/Weekend mode enables technicians to preset alarm thresholds based on routine changes in the environment.

\*PipelQ is included on a CD shipped with the device or as a download from [www.systemsensor.com](http://www.systemsensor.com).

## FAAST Specifications

### Electrical Specifications

External Supply Voltage	18-30 VDC
Remote Reset Time	External monitor must be pulled low for a minimum of 100 ms
Power Reset	1 sec.
Avg. Operating Current	500 mA @ 24 VDC
Alarm	650 mA – All relays active, all alarm levels displayed. Voltage @ 24 VDC
Relay Contact Ratings	3.0 A @ 30 VDC, 0.5 A @ 125 VAC

### Environmental Ratings

Operating Temperature	32°F (0°C) to 100°F (38°C)
Sampled Air Temperature	-4°F (-20°C) to 140°F (60°C)
Humidity Range	10 to 95% (non-condensing)
IP Rating	IP30
Coverage Area	8,000 sq. ft. (743 sq. m)
Air Movement	0-4,000 ft./min. (0-1,219 m/min.)

### Physical Specifications

Height	13.25 inches (33.7 cm)
Width	13.0 inches (33 cm)
Depth	5.0 inches (12.7 cm)
Cable Access	4 1-inch (2.54 cm) cable entry holes on top and bottom of unit
Wire Gauge	12 AWG (2.05 mm) max. to 24 AWG (0.5 mm) min.
Maximum Single Pipe Length	262 ft. (80 m)
Maximum Branched (2) Pipe Length	165 ft. (50 m) each branch
Maximum Air Inlet Holes	26 holes
Network Outside Pipe Diameter	1.050 inches, IPS (25 mm)
Internal Pipe Diameter	0.591 to 0.827 inches (15-21 mm)
Sensitivity Range	0.00046 %/ft. obs – 4.0 %/ft. obs
Relays	8 form C, 3 AMP, programmable latching or non-latching
Event Log	18,000 events stored
Communication Network	Ethernet monitoring, 6 E-mail address alerts
Shipping Weight	8.5 lbs. (3.8 kg), includes packing material



### FAAST User Interface Display

The User Interface consists of 5 Alarm levels – Alert, Action 1, Action 2, Fire 1, and Fire 2, 10 Particulate levels, 10 Bi-color Flow and Fault graph.

## Ordering Information

Part No.	Description
8100	System Sensor Conventional FAAST Fire Alarm Aspiration Sensing Technology
<b>Accessories</b>	
I56-3621-000	Comprehensive Instruction Manual
A3384-000	Replacement Air Filter Assembly
Various†	Language Card
Various†	UL-Approved Pipe and Fittings

†Additional accessory information, including part numbers, can be accessed at [systemsensor.com/faast](http://systemsensor.com/faast).



3825 Ohio Avenue • St. Charles, IL 60174  
Phone: 800-SENSOR2 • Fax: 630-377-6495

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CMDS00100 - 4/10 - #2361