

## SYSTEM SENSOR FAAST™ 8100 ASPIRATION DETECTOR

### DESCRIPTION

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 PipeIQ\* 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.

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

### 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
- PipeIQ™ 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

### 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
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.)
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:	40 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 – 6.25%/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



### APPROVALS:

- UL
- FM



## ORDERING INFORMATION

Fike P/N	Mfg. P/N	Description
68-126	8100	FAAST Conventional Detector
68-127	F-A3384-000	Air Filter
68-128	F-LCARD-SP	Language Card - Spanish
68-129	P-PIPE-210	CPVC Pipe: 14 lengths of 15 foot pipe (210 ft)
68-130	P-COUPLING	Coupling (15 per pkg)
68-131	P-ELB-45	45° Elbow (10 per pkg)
68-132	P-ELB-90	90° Elbow (20 per pkg)
68-133	P-ENDCAP	End Cap (25 per pkg)
68-134	P-TEE	Tee (15 per pkg)
68-135	P-UNION	Union (10 per pkg)
68-136	P-LABEL-T	Pipe Label (100 per roll)
68-137	P-LABEL-P	Sampling Point Labels (100 per roll)
68-138	P-SAMP-KT	Sampling Point Kit* (10 sets)

*\*Sampling Point Kit, P-SAMP-KT, includes 10 sets of the following components:*

*3/4" x 3/4" x 1/2" MNPT CPVC Tee fitting, 3/8" to 1/2" MNPT Fitting, 14 feet of flexible capillary tubing (3/8" x 1/4") and Sample point fitting with 1/16" pre-drilled hole and label which states "Air Sampling Point"*