

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
- 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
- Monitoring and configuration via Modbus/TCP protocol over Ethernet
- Fault indictors 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















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, remotely through a web browser when the detector is connected to a network, or by Modbus/TCP protocol over Ethernet. When connected to a mail server, FAAST can also email status updates to appropriate personnel. The detector can also 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.

*A complimentary download of PipeIQ is available at systemsensor.com/faast.

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. (800 sq. m)
Air Movement	0-4,000 ft./min. (0-1,219 m/min.)

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	165 ft. (50 m) each branch
Length	
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% Obs/ft to 6.25% Obs/ft
	(0.0015% Obs/m to 20.5%
	Obs/m)
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,
	Modbus/TCP
Shipping Weight	11.6 lbs (5.26kg),
	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	
Accessories		
CMKT00100	FAAST Information Kit – Includes Comprehensive Instruction Manual	
F-A3384-000	Replacement Air Filter Assembly	
Various [†]	Language Card	
Various [†]	UL-Approved Pipe and Fittings	
+ 4 1 1222		

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

