



FAAST XM Intelligent Aspirating Smoke Detector

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ISO 9001: 2008

International
Standards
Certifications
QAC/R64/0012

FAAST analogue addressable aspirating smoke detectors deliver highly accurate Very Early Warning Fire Detection directly over the analogue addressable loop to a fire alarm panel, enabling maximum protection in mission-critical and challenging environments.

Product Overview:

The **FAAST XM Intelligent Aspirating Smoke Detector (8251BPI)** combines **Dual Vision** (blue LED and infrared laser) optical smoke detection with intelligent fire alarm panel connectivity using an analogue addressable loop.

The detector provides class A, B or C smoke detection, using an air sampling system that continuously draws air from the controlled environment into the detector chamber through a sampling pipe.

The three-stage filtering and particle rejection system ensures high sensitivity to smoke with excellent immunity to nuisance particles. The particle separator ensures that heavy particles bypass the detection chamber, extending filter life and preventing detection chamber contamination. An easily replaceable filter protects the chamber from other large particles. The shape of the detection chamber is designed to resist the build-up of nuisance particles. The **Dual Vision** sensing system employs advanced software to combine the signals from two separate light sensors for maximum smoke sensitivity while rejecting signals from nuisance particles.

The detector can be connected to an analogue addressable loop for direct communication with a fire alarm panel. The FAAST 8251BPI detector reports to the panel as a FAAST detector. FAAST's PipeIQ®* software allows the detector's sensitivity levels to be configured to match the panel's pre-alarm and alarm settings.

The detector can be monitored through its integral display, from a computer connected to the device, or remotely through a web browser. When suitably connected, the detector can e-mail status updates to appropriate personnel.

The FAAST 8251BPI is fully compatible with the Pertronic F120A fire alarm panel and the F100A fire alarm panel, the Pertronic network system and Pertronic FireMap™ Graphics System.



FAAST 8251BPI Intelligent Aspirating Smoke Detector

Features:

- ▶ Analogue addressable loop connectivity
- ▶ Draws air through a network of sampling pipes
- ▶ High sensitivity for extremely early smoke detection
- ▶ Five alarm levels and three modes (Standard, Day/Night/Weekend & Acclimate™) for application flexibility
- ▶ Day/Night/Weekend mode enables pre-set thresholds based on routine changes in the environment's usage
- ▶ In Acclimate™ mode the detector automatically adjusts thresholds to current environmental conditions
- ▶ Dual flow detection including both ultrasonic and electronic sensing for pipe and chamber air flow
- ▶ 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
- ▶ Ethernet interface for remote monitoring and configuration
- ▶ Unique air flow pendulum graph verifies pipe network functionality
- ▶ Particulate graph displays subtle environmental changes for early problem indications

Specifications:

▶ Smoke Sensor	Optical Dual Vision , blue LED and infrared laser	
▶ Sensitivity Range	0.00095%Obs/m to 20.5%Obs/m	
▶ Air Inlet	One. Optional top or bottom entry	
▶ Maximum Coverage Area	1,000 m ² †	
▶ Air Movement	0 – 1,200 m/min	
▶ Single Pipe Length ‡	Up to 80 m (Indicative) †	
▶ Aggregate Pipe Length	Up to 137 m (Indicative) †	
▶ Maximum Air Inlet Holes	36 holes †	
▶ Pipe Outside Diameter	25 mm	
▶ Pipe Internal Diameter	21 mm	
▶ External Supply Voltage	18 Vdc to 30 Vdc	
▶ Operating Current	Average 415 mA @ 24 Vdc	
	Alarm 465 mA @ 24 Vdc – All relays active, all alarm levels displayed	
▶ Average Loop Current	700 µA	
▶ Loop Voltage Range	15 Vdc to 32 Vdc	
▶ Maximum Devices	Up to 99 FFAST devices per loop	
▶ Relays	Six, programmable latching or non-latching	
▶ Relay Contacts	Changeover (NC-C-NO), 3.0 A @ 30 Vdc, 0.5 A @ 125 Vac	
▶ Communication Network	Ethernet monitoring, 6 email address alerts; TCP	
▶ Event Log	18,000 events stored	
▶ Cable Access	Four 25 mm Ø cable entry holes on top and bottom of unit	
▶ Wire Size	0.2 mm ² min. to 2.5 mm ² max.	
▶ Operating Temperature	- 10°C to 55°C	
▶ Sampled Air Temperature	- 20°C to 60°C	
▶ Humidity	10 to 95% RH, non-condensing	
▶ IP Rating	IP30	
▶ Dimensions	337 mm x 330 mm x 127 mm	H x W x D
▶ Shipping Weight	5.3 kg including packaging	

Ordering Information:		
Product Code	Description	NZFPA Listing No:
8251BPI	FAAST XM AA Loop Based Aspirating Smoke Detector (1,000 m ²)	PI/358
FAAST-FILTER30MICRON	FAAST 8000 & 9000 Series 30 Micron Air Filter	

* PipelQ® can be downloaded from www.pertronic.co.nz

† Indicative maximum pipe lengths for standard fire detection (SFD) to UL Standards. Designs to AS1670 or NZS4512 may allow longer pipe lengths. Designs for Early Warning Fire Detection (EWFD) and Very Early Warning Fire Detection (VEWFD) may require shorter pipe lengths. All sampling pipe system designs must be verified using PipelQ.

‡ Single pipe length: The length of pipe in a single branch system.

FAAST Fire Alarm Aspiration Sensing Technology® is a trademark of System Sensor, 3825 Ohio Avenue, St. Charles, IL.

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