

# **FAAST XT Intelligent Aspirating Smoke Detector**

The FAAST range of 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 XT Intelligent Aspirating Smoke Detector (9251BPI) combines Dual Vision (blue LED and infrared laser) optical smoke detection with advanced detection algorithms, a wide-area sampling system, and intelligent fire alarm panel connectivity using an analogue addressable loop.

The detector incorporates 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 smaller particles. The shape of the detection chamber is also designed to resist the build-up of nuisance particles. The **Dual Vision** sensing system employs advanced software to



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combine the signals from two separate light sensors for maximum smoke sensitivity while rejecting signals from nuisance particles. FAAST XT 9251BPI can accurately detect incipient fire conditions before a fire actually starts.

The detector can be connected to an analogue addressable loop for direct communication with a fire alarm panel. The FAAST XT 9251BPI detector is uniquely identified at the panel as a FAAST detector. FAAST's PipelQ $^{\otimes}$ \* software allows the detector's sensitivity levels to be configured to match the panel's pre-alarm and alarm settings. The device can also be monitored through its integral display, from a computer connected to the device, or remotely through a web browser. When suitably connected, FAAST XT 9251BPI can send out status updates by email.

The FAAST XT 9251BPI 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.

## **Features:**

- » Analogue addressable loop connectivity
- » Protects up to 2650 m² in standard coverage applications
- » High sensitivity for extremely early smoke detection
- » Five alarm levels: Alert, Action 1, Action 2, Fire 1 and Fire 2
- » Two operating modes (Day/Night/Weekend and 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 ultrasonic and electronic sensing for pipe and chamber airflow measurement
- » Configurable 3-speed fan allows for maximum coverage area or minimum current consumption
- » Easy configuration via USB or Ethernet
- » Ethernet interface enables remote monitoring, configuration, web server and e-mail
- » LCD display provides interactive access to detailed information and user control functions
- » Configurable air flow fault thresholds and verification period
- » Unique air flow pendulum graph verifies pipe network functionality
- » Particulate graph displays subtle environmental changes for early indication of problems

## **Specifications:**

Smoke Sensor
 Optical **Dual Vision:** blue LED and infrared laser
 Sensitivity Range
 0.00095 % obs/m to 20.5 % obscuration/m

» Air Inlet
Four. optional top or bottom entry

Maximum Coverage Area
 Air Movement
 2650 m² †
 1200 m/min

» Single Pipe Length Up to 123 m (Indicative) (The length of pipe in a single branch system) ‡

» Aggregate Pipe Length Up to 320 m (Indicative) ‡

» Pipe Outside Diameter 25 mm» Pipe Internal Diameter 21 mm

» External Supply Voltage 18 VDC - 30 VDC

Operating Current
 Fan Low – 220 mA; Fan Med – 340 mA; Fan High – 465 mA: @ 24 VDC
 Alarm Current
 Fan Low – 248 mA; Fan Med – 368 mA; Fan High – 493 mA: @ 24 VDC

» Average Loop Current 700 μA

» Loop Voltage Range 15 VDC to 32 VDC

» 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; serial Modbus

» Event Log 18,000 events stored

» Trend Data Log Configurable sampling period 1 minute to 1 day

Service Log
 Ethernet
 300 custom user entries
 10/100 Mbps, MDI-X

» Network Services
DHCP, SMTP, HTTP, Auto IP, NetBIOS-NS

Email 6 recipients, selectable notifications
 Web Server Read Configuration, Live View, Logs
 Configuration PipelQ® \*, via USB or Ethernet

» Cable Access Four 25 mm Ø cable entry holes on top (2), bottom and back of unit

» Wire Size 0.2 mm² min. to 2.5 mm² max.

» Operating Temperature 0 °C to 38 °C; Factory tested to 55 °C

» Sampled Air Temperature -20 °C to 60 °C

» Humidity
10 % to 95 % RH, non-condensing

» IP Rating IP30

» Dimensions 338 mm x 333 mm x 191 mm H x W x D

» Shipping Weight 6.9 kg including packaging

## **Listings and Approvals:**

ActivFire: AFP - 3017

## **Ordering Information:**

Product Code	Description
9251BPI	FAAST XT AA Loop Based 4 Pipe Aspirating Smoke Detector (2,000 m²)
FAAST-FILTER30MICRON	FAAST 8000 & 9000 Series 30 Micron Air Filter

<sup>\*</sup> PipeIQ® can be downloaded from www.pertronic.com.au

FAAST Fire Alarm Aspiration Sensing Technology® is a trademark of System Sensor, 3852 Ohio Avenue, St. Charles, IL.

<sup>†</sup> The maximum permissible zone area for a particular installation may be limited by applicable codes, standards, and/or specifications. AS1670.1-2004 and NZS4512:2010 restrict the zone area to 2000m² or less, depending on site details.

<sup>‡</sup> 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 Warming Fire Detection (EWFD) and Very Early Warming Fire Detection (VEWFD) may require shorter pipe lengths. **All sampling pipe system designs must be verified using PipelQ.**