



# FAAST XS Conventional Aspirating Smoke Detector

*The FAAST range of aspirating smoke detectors deliver highly accurate Very Early Warning Fire Detection over a wide coverage area and extensive communication capabilities to provide maximum protection in challenging environments.*

## Product Overview:

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The **FAAST XS Conventional Aspirating Smoke Detector (7100X)** combines **Dual Vision** (blue LED and infrared laser) optical smoke detection with advanced detection algorithms and a wide-area sampling system.

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 combine the signals from two separate light sensors for maximum smoke sensitivity while rejecting signals from nuisance particles. FAAST 7100X can accurately detect incipient fire conditions before a fire actually starts.

An installed device can protect up to 600 m<sup>2</sup> in standard coverage applications. It can be monitored through its integral display, from a computer connected to the device, or remotely through a web browser. When suitably connected, FAAST 7100X can send out status updates by email.

Users are guided through pipe layout design and detector configuration by the FAAST PipeIQ<sup>®</sup>\* design, configuration and monitoring software.



**FAAST 7100X Conventional Aspirating Smoke Detector**

## Features:

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- » Draws air through a network of sampling pipes
- » High sensitivity for extremely early smoke detection
- » Three alarm levels: Alert, 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 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 problem indications

## Specifications:

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» Smoke Sensor	Optical <b>Dual Vision</b> : 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	600 m <sup>2</sup> †
» Air Movement	0 - 1200 m/min
» Single Pipe Length	Up to 55 m (Indicative) (The length of pipe in a single branch system) ‡
» Aggregate Pipe Length	Up to 91.5 m (Indicative) ‡
» Pipe Outside Diameter	25 mm
» Pipe Internal Diameter	21 mm
» External Supply Voltage	18 VDC – 30 VDC
» Operating Current	Fan Low – 120 mA; Fan Med – 151 mA; Fan High – 200 mA: @ 24 Vdc
» Alarm Current	Fan Low – 142 mA; Fan Med – 172 mA; Fan High – 230 mA: @ 24 VDC
» Relays	Four, programmable latching or non-latching (Alert; Fire 1; Fire 2; Fault)
» 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	300 custom user entries
» Ethernet	10/100 Mbps, MDI-X
» Network Services	DHCP, SMTP, HTTP, Auto IP, NetBIOS-NS, Serial Modbus
» Email	6 recipients, selectable notifications
» Web Server	Read Configuration, Live View, Logs
» Configuration	PipelQ® *, via USB interface or Ethernet
» Cable Access	Three 25 mm Ø cable entry holes on top left, rear top left, left top corner
» Wire Size	0.2 mm <sup>2</sup> min. to 2.5 mm <sup>2</sup> 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	279 mm x 229 mm x 159 mm      H x W x D
» Shipping Weight	3.99 kg including packaging
» Net Weight	2.98 kg

## Listings and Approvals:

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ActivFire: AFP – 3013

## Ordering Information:

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Product Code	Description
7100X	FAAST XS Stand Alone Aspirating Smoke Detector (600 m <sup>2</sup> )
FAAST-FILTER30MICRON	FAAST 8000 & 9000 Series 30 Micron Air Filter

\* PipelQ® can be downloaded from [www.pertronic.com.au](http://www.pertronic.com.au)

† 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 600m<sup>2</sup> or less, depending on site details.

‡ 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.**

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