

FAAST-XS, FAAST-XT, FAAST-XT-PRO Intelligent FAAST Series Detectors



General

Intelligent FAAST Series aspirating smoke detectors deliver highly accurate early warning fire detection and standard fire detection. This meets the needs of a variety of environments, including mission-critical facilities like data centers where down-time from smoke or fires can be incredibly costly.

The ability to configure FAAST for standard fire detection allows FAAST to be used in harsh environments where standard spot detectors may be subject to nuisance alarm conditions. As FAAST can be easily tested via a text port within the pipe network, it can simplify the testing associated with standard detectors.

The intelligent FAAST Series detectors combine dual-source optical smoke detection (blue LED and infrared laser) with advanced algorithms to detect a wide range of fires, while maintaining enhanced immunity to nuisance particulates. The combination enables the detectors to accurately detect incipient fire conditions.

Three models are available for use in different size and style of applications: FAAST XS, FAAST XT and FAAST XT PRO.

- **FAAST XS:** Up to 464 sq. m through one pipe.
- **FAAST XT:** Up to 2601 sq. m through one to four pipes.
- **FAAST XT PRO:** Up to 2601 sq. m through one to four addressable pipes.

These detectors are listed for use with the AFP-3030 and operate in FlashScan mode only.

An Intelligent FAAST series detector connects to the SLC loop of compatible intelligent panels using FlashScan protocol to communicate up to five levels of events for display and use in control-by-event system programming. With FAAST XT PRO, individual pipes can be assigned an address to quickly pinpoint the inlet drawing smoke. Using the SLC connection, the system operator can also review real-time information on percent of alarm, drift compensation percent and temperature. The system operator can also put an Intelligent FAAST detector into service mode, or reset airflow baselines.

Intelligent FAAST series detectors support multiple sensitivity models; two for FAAST XS and three for FAAST XS PRO. In Acclimate mode, the detector automatically adjusts itself to current environmental conditions to reduce nuisance alarms. Day/Night/Weekend mode enables technicians preset alarm thresholds based on routine changes in the environment.

Alternate or additional monitoring is supported in several different ways, including: Serial or TCP Modbus, Ethernet over a LAN or a direct connection, or via onboard USB. When connected to a LAN, FAAST series devices email server can provide email event notification to appropriate personnel.

PipeIQ is intuitive design, configuration, and monitoring software used for all FAAST series devices. The all-in-one program can be used to create a pipe network tailored to meet site specific requirements, configure a FAAST device, and monitor an installed device. Live trending and historic reports are available.

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Intelligent FAAST Series Detectors

Features:

- Detection as precise as 0.00029%/ft. obscuration
- Multiple alarm levels provide application flexibility: three on FAAST XS, and five on FAAST XT and FAAST XT PRO.
- 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. An Intelligent FAAST series detector can self-adapt to its environment in 24 hours.
- All devices provide ultrasonic sensing for pipe and chamber air-flow measurements.
- Advanced detection algorithms reject common nuisance conditions.
- Patented particle separator and field-replaceable filter remove contaminants from the system.
- Intuitive system layout, configuration, and monitoring provided by PipeIQ software.
- Comprehensive, simple and intuitive display has real-time quick-read information at the device including alarm levels, particulate levels, air flow, power and a wide range of faults to quickly identify the problem for prompt correction.
- The onboard Ethernet interface enables monitoring from any compatible Internet browser, smart phone or mobile device with VPN capability. Detector can be configured to email status updates to appropriate personnel.
- TCP and serial Modbus for easy integration with Building Management Systems.
- Fault indicators exhibit a broad spectrum of events.
- Unique air flow pendulum graph verifies pipe network functionality.
- Particulate graph displays subtle environment changes for early problem indicators
- Approved for use in Class I, Division, Groups A, B, C and D Hazardous Locations (FAAST XT only).
- User configuration 3-speed fan, allowing for maximum coverage area or minimizing current consumption.

FlashScan Capabilities:

- FAAST Series Detectors connect to the Signaling Line Circuit (SLC) loop of AFP-3030 panels.
- Uses 5 detector SLC addresses, which support multiple event thresholds individually programmed for descriptive labels, and control by event logic. *Sensitivity for all event thresholds are programmed with the PipeIQ utility:*
 - FAAST XT, FAAST XT PRO: Up to 5 event thresholds.
 - FAAST XS: Up to 3 event thresholds.
- FAAST XT PRO: supports addressable pipes to pinpoint location of alarm events.
- Detector trouble reporting at panel.
- Supports setting one device as an Aspiration Reference for other Intelligent FAAST sensors on the same SLC loop.

AFP-3030 / NCA2 Capabilities:

- Displays the specific pipe address of alarm events detected by FAAST-XP-PRO.
- Displays the real-time read status of percent of alarm, drift compensation percentage and temperature by point.
- Put Intelligent FAAST detectors into Service Mode, shutting the device down for maintenance.
- Reset airflow baselines for an Intelligent FAAST detector.
- Individual CBE activation of the event relays on the Intelligent FAAST (relays also turn on based on the associated event level threshold.)

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Electrical Specifications:

Electrical Supply Voltage:	18-30 VDC
Power Reset:	1 sec
Relay Contact Ratings:	3.0 A @ VDC, 0.5 A @ 125 VAC

Environmental Ratings:

Operating Temperature:	0°C to 38°C
Sampled Air Temperature:	20°C to 60°C
Humidity Range:	10 to 95% (non-condensing)
IP Rating:	IP30
Air Movement:	0-4000ft./min (0-1219m/min)
Sensitivity Range:	0.00029%ft. obs – 6.25%ft. obs

Physical Specifications:

SLC Connection:	Standard SLC connections. Class B (formerly Style 4) or Class A (formerly Style 6/7)
Communication Network:	Ethernet monitoring, 6 email address alerts, Modbus/TCP
Network Outside Pipe Diameter:	25mm
Internal Pipe Diameter:	15-21mm
Event Log:	18000 events stored

Specifications for Specific Models:

FAAST XS:

Coverage:	Up to 464 sq. m through one pipe
Cable Access:	Three cable entry holes located on the top, side and the back of the unit (2.54cm)
AVG Operating Current:	Fan High – 200mA; Fan Med – 151mA; Fan Low 120mA
Alarm:	Fan High – 230mA; Fan Med – 172mA; Fan Low – 142mA
Relays:	5 Form C, 3 A, programmable latching or non-latching
Maximum Single Pipe Length:	54m - <i>All designs must be verified within PipeIQ software</i>
Total Pipe Length:	68m - <i>All designs must be verified within PipeIQ software</i>
Size:	27.9cm tall x 22.9cm wide x 15.9cm deep.
Shipping Weight:	3.99kgs – includes packaging material

FAAST XT AND FAAST XT PRO:

Coverage:	2676sq. m through one to four pipes
Cable Access:	Four cable entry holes located on top and bottom of unit (2.54cm)
Average Operating Current:	Fan High – 465mA; Fan Med – 340mA; Fan Low – 220mA
Alarm:	Fan High – 493mA; Fan Med – 368mA; Fan Low – 248mA
Relays:	8 Form C, 3 A, programmable latching or non-latching.
Maximum Single Pipe Length:	123m – <i>All designs must be verified within PipeIQ software</i>
Total Pipe Length:	320m – <i>All designs must be verified within PipeIQ software</i>
Size:	33.8cm tall x 33.3cm wide x 19.1cm deep
Shipping Weight:	5.4kgs – includes packing material

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User Interface Display

Alarm Levels:

- FAAST XS: Three alarm levels (Alert, Fire 1 & Fire 2).
- FAAST XT, FAAST XT PRO: Five alarm levels (Alert, Action 1, Action 2, and Fire 1 and Fire 2).

Ten Particular Levels:

- FAAST XS: Three single-colour flow with more info on the LCD.
- FAAST XT, FAAST XT PRO: Ten single colour flow with more info on the LCD.

Agency Listings and Approvals

The listing and approvals below apply to Intelligent FAAST Series components. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in progress. Consult factory for latest listing status.

- ActivFire Listing Pending
- Approved for use in Class I, Division 2, Groups A,B,C and D Hazardous Locations (FAAST XT only)



User Interface Display: Intelligent FAAST XS



User Interface Display: Intelligent FAAST XT and
Intelligent FAAST XT PRO