



by Honeywell

FAAST XS® AAD-7100X/7100X

Description

FAAST XS® aspirating smoke detectors from Gamewell-FCI deliver highly accurate Very Early Warning Fire Detection for the smaller applications and offer extensive communication capabilities. The FAAST XS combines advanced particle separation with unique dual source optical smoke detection technology to provide highly sensitive Very Early Warning Fire Detection while providing enhanced immunity to false alarms. This technology enables FAAST XS to accurately detect incipient fire conditions as early as 60 minutes before a fire actually starts when set for Early Warning and Very Early Warning Fire Detection in applications ranging from mission critical to harsh and extreme environments applications.

The Intelligent FAAST XS Detector, AAD-7100X, can be wired without additional hardware to a new or pre-existing Signaling Line Circuit (SLC). The SLC is used for transmitting communications directly to an E3 Series® or S3 Series fire alarm control panel, utilizing the Velociti® mode. In the Velociti® mode, the Intelligent FAAST XS will report back to the fire alarm control panel as an aspirating detector. By setting the sensitivity levels in PipeIQ®, the fire alarm control panel will initiate pre-alarm and alarm conditions based on the feedback sent from the FAAST XS unit. Using the Velociti mode, up to 159 units can populate one SLC. A Conventional FAAST XS model is also available which communicates alarm and notifications via Form C relays.

FAAST XS can also be monitored by Serial or TCP Modbus, Ethernet over a LAN or a direct connection, or via FAAST XS's onboard USB. When connected to a LAN, FAAST XS's email server can provide email event notification to appropriate personnel..

PipeIQ® is FAAST XS's intuitive design, configuration, and monitoring software. The all-in-one program can be used to create a pipe network tailored to meet site specific requirements, configure a FAAST XS device, and monitor an installed device -- including live trending and reading of historic reports.

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

PipeIQ®, E3 Series® and Velociti® are registered trademarks of Honeywell International Inc. FAAST® is a registered trademark of System Sensor Inc. Modbus® is a registered trademark of Modbus Organization. UL® is a registered trademark of Underwriter's Laboratories, Inc.

FAAST XS Fire Alarm Aspiration Sensing Technology®



AAD-7100X

Features

- Provides Very Early Warning Fire Detection, as precise as 0.00029%/ft obscuration.
- Intelligent version (AAD-7100X) offers direct SLC connectivity to an E3 or S3 panel via the Velociti protocol, with up to 159 Intelligent FAAST XS devices per loop.
- Three alarm levels and three sensitivity modes provide application flexibility.
- User configurable 3-speed fan, allowing for maximum coverage area or minimizing on current consumption.
- Ultrasonic flow sensing and chamber airflow monitoring for precise system health information.
- A single device covers up to 5,000 square ft. (464 sq.m).
- Dual source optical detection chamber with enhanced algorithms provide high sensitivity with greater immunity to nuisance conditions.
- Patented particle separator removes large, non-fire particulate, ensuring chamber health and extending the life of the field replaceable filter.
- TCP and Serial Modbus for easy integration with building management systems.
- Easy configuration via USB interface, no external power.
- Onboard Ethernet interface enables remote monitoring, configuration, web server and e-mail notifications.
- Multilingual LCD user interface allows for detailed device information and interaction such as: Active faults, precise airflow monitoring, reset of airflow baseline, test/reset/isolate, and more.
- Configurable air flow fault thresholds & verification period.
- Convenient wiring compartment.
- Status-at-a-glance provides immediate alarm, fault and airflow status.



GAMEWELL-FCI

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Specifications are for information only, are not intended for installation purposes, and are subject to change without notice. No responsibility is assumed by Gamewell-FCI for their use.

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9021-60902 Rev. A page 1 of 2

Specifications

FAAST XS 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 Fan High - 200mA, 4.8W;
Fan Med - 151mA, 3.7W;
Fan Low - 120mA, 2.1W

Alarm Fan High - 230mA, 5.6W;
Fan Med - 172mA, 4.2W;
Fan Low - 142mA, 3.5W

Relay Contact Ratings 3.0 A @ 30 VDC;
0.5 A @ 125 VAC;
3 (Int.) or 5 (Conv.) Form C,
3 AMP, programmable latching
or non-latching.

**Average SLC
Operating Current:** 700 μ A

Operating Specifications

Operating Temperature 32°F (0°C) to 100°F (38°C);
Factory Tested to 131°F (55°C)

**Sampled Air
Temperature** -4°F (-20°C) to 140°F (60°C)

Humidity Range 10 to 95% (non-condensing)

Sensitivity Range 0.00029% Obs/ft to 6.25%
Obs/ft (0.000095% Obs/m to
20.5% Obs/m)

IP Rating IP30

Coverage Area 5,000 ft. (464 sq.m)

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

Physical Specifications

Height 11.0 in (279 mm)

Width 9.0 in (229 mm)

Depth 6.25 in (159 mm)

Cable Access 3 1-inch (2.54 cm) cable entry
holes on top, and back of the
unit.

Wire Gauge 12 AWG (2.05 mm) max. to
24 AWG (0.5 mm) min.

**Maximum Single Pipe
Length** 180 ft. (54.9)*

**Total Aggregate Pipe
Length** 225 ft. (68.6 m)*

*All designs must be verified within PipelQ software.

Outside Pipe Diameter 1,050 inches, IPS (25 mm)

Internal Pipe Diameter 0.591 to 0.827 inches (15-21 mm)

Relays 3 (Int.) or 5 (Conv.) Form C,
3 AMP, programmable latching
or non-latching

Diagnostic Specifications

Event Log 18,000 events stored

Trend Data Log Configurable sampling period
(1 minute to 1 day)

Service Log 300 custom user entries

Networking Specifications

**Communication
Network** Ethernet monitoring, 6 E-mail
address alerts, TCP and
Serial Modbus

Specifications (Continued)

Network Services DHCP, SMTP, HTTP, MODBUS/
TCP, AutoIP, NetBIOS-NS,
Serial MODBUS

Ethernet 10/100Mbps, MDI-X

Modbus TCP or Serial RS-485

Email 6 recipients, selectable
notification

Webserver Read Configuration Live View,
Logs

Configuration Specifications

PipelQ USB or Ethernet

Modbus Ethernet or RS-485

Figure 1 illustrates the FAAST XS user interface display.



Figure 1 - Intelligent FAAST XS User Interface Display

The User Interface consists of 3 Alarm levels:

- Alert
- Fire 1
- Fire 2
- 10 Particulate levels
- 10 Airflow indicators
- 4 Fault indicators, LCD

Ordering Information

Part Number Description

AAD-7100X Intelligent FAAST Fire Alarm Aspiration
Sensing Technology (5,000 sq. foot unit)

7100X Conventional FAAST Fire Alarm Aspiration
Sensing Technology (5,000 sq. foot unit)

Accessories

Various† UL®-Approved Pipe and Fittings

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

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9021-60902 Rev. A page 2 of 2 www.gamewell-fci.com