

Frequently Asked Questions

FAAST Fire Alarm Aspiration Sensing Technology®

Does FAAST offer any improvements against the false alarms associated with aspiration systems?

FAAST uses a unique dual source smoke detection technology designed to provide it with decision-making capabilities superior to other aspiration smoke detectors (ASDs) currently on the market. A blue LED that covers the widest range of fires is used to detect smoke. An infrared laser* is used to detect dust and other typical sources of false alarm. FAAST combines these dual detection sources with advanced algorithms to discriminate smoke from dust and drastically improve both smoke detection and false alarm immunity.

**Note that most competitive ASDs rely solely on an infrared laser for detection.*

Does System Sensor offer design support for pipe network layout?

Yes, FAAST's PipelIQ® software has a Pipe Wizard feature that can virtually lay out the pipe network for standard room configurations. For more complex layouts, the software allows the user or designer to lay out the network pipe by pipe if required. PipelIQ provides the following comprehensive assistance:

- Design the pipe layout, confirm transport times, balance the system, and obtain layout, bill of material and text reports in a pdf format
- Configure the 8100 unit, including specify sensitivity levels, configure relays, and establish action plans with customizable e-mail notifications
- Monitor active units either remotely via the software or globally via any Internet browser through FAAST's integral TCP/IP connectivity
- PipelIQ can be downloaded at www.systemsensor.com/faast

System Sensor also has a design and technical support team for more personalized assistance to designers and those writing specifications.

Does FAAST include micron-type filters like other ASDs on the market?

Yes, the FAAST device offers a unique three-stage filtration process. First, the sampled air passes through a patented Particle Separator that segregates large particles that are not associated with elements of combustion. The Particle Separator requires no cleaning or maintenance. Once the sample passes through the Particle Separator, it goes through a replaceable 30 micron filter to further strip nuisance-based particles from the sample. Finally, as described above, advanced algorithms calculate the signals generated by the two detection sources to further eliminate nuisance particulate from the sample and determine whether

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an alarm should be initiated. Due to the particulate eliminated by the Particle Separator, the replaceable 30 micron filter is rated for 4 years normal usage (double that of competitive units) prior to requiring maintenance for cleaning/replacement, reducing periodic costs.

My Data Center is required to run 24 hours a day, 7 days a week, 52 weeks a year. Can FAAST accommodate the environmental changes that often occur in this type of application?

FAAST includes System Sensor's proven Acclimate mode, which enhances performance by automatically adjusting sensitivity based on environmental conditions. At setup, users define an allowable range of sensitivity levels. Then, during ongoing operation, FAAST's Acclimate mode makes necessary adjustments to sensitivity based on environmental conditions. This further reduces false alarms while maintaining the highest sensitivity levels appropriate to conditions.

What is the typical interface to a Fire Alarm Control Panel (FACP)?

The FAAST 8100 is a conventional device with 8 dry contact relays corresponding to the five Alarms (Alert, Alarm 1, Alarm 2, Fire 1 and Fire 2), two Trouble (Minor Fault, Major Fault) and Isolate conditions. Therefore, one could connect an 8100 unit to an FACP via addressable monitor modules or addressable multi-monitor modules (10) via the eight alarm/trouble dry contact relays.

FAAST is also available in Intelligent versions that connect directly to the Signaling Line Circuit of major fire alarm control panel manufacturers. This allows the FAAST device to be on the same loop as standard spot detectors and report back statuses and trouble conditions without the need for additional hardware or software.

Can I connect FAAST to my Building Management System (BMS)?

Yes. FAAST communicates Modbus/TCP via its onboard Ethernet port. Using the Modbus protocol, FAAST can interface with existing Modbus BMS solutions and be read and configured remotely. All FAAST models ship standard with Modbus connectivity.

Can I buy a high-level interface to provide the necessary communication to a group of FAAST units?

A costly high level interface is not required with the FAAST 8100 model due to its integral TCP/IP connectivity. Typically, a high-level interface is required to identify the location of the initiating device. However, due to FAAST's TCP/IP connectivity, up to six individuals can be sent e-mail notifications that discretely identify which unit is the initiating device, and the location and details of the event. For example, events such as initiation of one of the five alarm levels or ten trouble conditions can be communicated. This provides the responding personnel the information necessary to investigate the event, run their operations efficiently, and most importantly, mitigate risk.

Do the pipe network sampling points need to be cleaned? If so, how often?

Annual testing/cleaning is recommended. Vacuum (preferred) or compressed air cleaning of the sampling points is to be conducted annually or as required depending on the application (similar to the testing and cleaning of a standard open-area detector). Annual testing of the furthest sampling point is conducted via a smoke source and the transport time is measured to ensure that it is within the allowable requirement. Local jurisdictions may require that each sampling point be tested as well.

Where does System Sensor manufacture the FAAST Aspiration Detector?

The FAAST 8100 is manufactured in the United States at our St. Charles, Ill., facility, which also serves as our global headquarters.

Where can I learn more about the System Sensor FAAST Fire Alarm Aspiration Sensing Technology?

You can find more information at systemsensor.com/faast. This page includes a host of documents, videos, and other resources that provide information on how FAAST can reduce false alarms, resolve difficult applications, and grow your business.



www.systemsensor.com/faast