Ionization Smoke Detector: Remove, Recycle, Replace.

In their time, ionization smoke detectors provided optimal detection with the best available technology. As technology progressed, photoelectric and multi-criteria detectors have evolved to provide comparable or better performance while delivering superior false alarm immunity. Due to their radioactive content, ionization detectors have also become more costly to manufacture and recycle. **System Sensor has therefore decided to discontinue the manufacture of ionization smoke detectors as of July 1, 2015.**

If you are not sure what type of detectors to use in place of your ionization smoke detectors, we would be happy to help. System Sensor offers a variety of smoke detectors to suit nearly any application. If you would like additional guidance, you can contact our technical service group at (800) 736-7672. For more information on how to recycle your used ionization detectors, please see our technical bulletin at **go.systemsensor.com/IONdetectors**.



Original ION Detector
Pre - 1993



ION Detector
1993-2002



Current ION Detector
2002 - Today

Make the switch to environmentally friendly detectors

Standard Smoke Detection

As the predecessor to photoelectric detectors, ionization detectors were often used in common applications such as offices, retail spaces, and apartments. Although ionization detectors were great at detecting fires in these applications, they are also prone to common nuisance sources such as light cooking and fine dust.

Recommended Replacement:
Acclimate Multi-Criteria detectors or Photoelectric detectors

The Acclimate Multi-Criteria detector is well suited for applications where general smoke detection and improved immunity to false alarms are desired. These detectors "learn" their environment and adjust their sensitivity to help prevent false alarms. With both smoke and heat sensors, the Acclimate is designed to respond more quickly to fires that create a heat rise. They are also UL listed as both a smoke and heat detector.

Today's photoelectric smoke detectors have advanced algorithms and enhanced optics that provide superior smoke detection with fewer nuisance alarms.

Flaming Fire Detection

Ionization smoke detectors are often used in applications where there is a high potential for flaming fires. These types of fires typically produce smaller smoke particulate in lower concentrations than other types of fires.

Recommended Replacement:
Advanced Multi-Criteria detectors or FAAST aspirating smoke detectors

Although Advanced Multi-Criteria detectors are primarily known for ability to reduce false alarms, they can also be programmed to respond very quickly to flaming fires. These detectors utilize an infrared sensor to detect flame signatures as well as heat sensors to force a faster response when a temperature increase is detected.

FAAST Aspirating smoke detectors utilize dual vision sensing technology to detect trace amounts of smoke particulate while reducing false alarms. These detectors have advanced features to help you tailor your response such as multiple pre-alarm levels and the ability to send email notifications.

Cross Zoning

For years, ionization smoke detectors have been used in cross-zoning applications to confirm a fire event before releasing a suppression agent. These applications typically call for two different detection technologies (usually photoelectric and ionization) in each of the two zones.

Recommended Replacement:
FAAST aspirating smoke detectors or Photoelectric/Multi-Criteria Detectors

FAAST aspirating detectors are being used in place of traditional cross zoning because of their ability to control response based on multiple pre-alarm levels. Their broad sensitivity range combined with their ability to ignore common nuisance sources make these detectors ideal in suppression release applications.

Multi-Criteria detectors significantly reduce false alarms, possibly eliminating the need for cross-zoning altogether. When cross-zoning is still required, photoelectric detectors can be used on their own or in combination with multi-criteria detectors. Contact our technical service group for more information.

Clean Room/Mission Critical

Ionization detectors used to be the technology of choice for clean environments where early detection of incipient fires is important. Ionization detectors can detect small smoke particulate in fairly low concentrations.

Recommended Replacement:
Laser-based high-sensitivity spot detectors or FAAST aspirating smoke detectors

Laser-based high-sensitivity spot detectors are the most responsive spot detectors on the market today. These detectors can detect smoke concentrations down to 0.02%/foot and exceed the strict NFPA76 criteria for very early warning smoke detection. A typical ionization detector is only capable of detecting concentrations down to 0.5%/foot. Laser-based detectors are also able to better distinguish between smoke and non-smoke particulate, improving their ability to prevent nuisance alarms.

FAAST aspirating smoke detectors are ideal for clean room and mission critical environments. They can detect ultra-low concentrations of smoke down to 0.0046%/foot and are also NFPA76 compliant for very early warning applications. The FAAST detector's nuisance rejection capability combined with up to six-pre-alarm levels make these detectors ideal for applications where uptime is critical.



Acclimate™ Multi-Criteria Detectors



Advanced Multi-Criteria Detectors



FAAST Aspirating Smoke Detectors



Laser-based High-sensitivity Detectors

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SPFL78501 • 0315