

HIGH SENSITIVITY - AIR SAMPLING SMOKE DETECTION

EARLY WARNING SMOKE DETECTION

Electric Scientific Company

High air change from cooling systems, smoke dilution, airflow patterns, heat interfaces, dusty conditions and high ceilings are all factors that create a tough environment for standard smoke detectors to detect smoke. For most of today's critical equipment rooms, too much damage has already occurred by the time standard detection has alarmed.

Today there is high sensitivity detection that can give you warning of a fire condition long before standard fire detection. Fenwal has developed a laser technology Air Sampling Smoke Detector that provides up to a 1000 times more sensitive than traditional smoke detectors. The Air Sampling Detector (ASD) is an active detector that continually draws air samples from a room with CPVC pipe and air sampling points. Air sampling points are installed at the ceiling, at specific elevations, by return air vents, into equipment cabinets, and other strategic locations to optimize smoke detection. The ASD determines the smoke obscuration level of the air to provide pre-alarms, alarms and operate functions that are programmed into the fire protection system.

BENEFITS OF AIR SAMPLING DETECTION:

- To provide the earliest warning possible an impending fire to allow quick fire response - reducing damage to your sensitive equipment. Heat and smoke damage can also be a problem for adjacent equipment. The goal is to detect the smoldering material before an actual fire occurs.
- Early warning of a fire can minimize downtime and reduce (or eliminate) business interruption and its associated costs.
- Provide time to deal with a problem manually, reducing the need to rely on the fire suppression system (Gaseous Clean Agent or Sprinkler System).
- Earlier warning of a fire can equate to improved personnel safety.

AIR SAMPLING DETECTION FEATURES

- Sensitivities adjustable from .3% to .00075% per foot smoke obscuration
 - Standard detectors are typical 1.5% to 3.5% obscuration
- Laser Technology for longer life and superior detection
- Network directly to a Fenwal Intelligent Fire Control Panel
- Programmable prealarm and alarm levels to perform desired functions
- History logging of smoke levels, events and system operation
- Customizing functions to allow high sensitivity detection in dirty industrial environments
- Can provide simpler, safer and faster serviceability than standard smoke detectors in many applications