

System Sensor Detectors – Intelligent series 200 sensors

Series 200 Plus harnesses the power of new technology to create an expanded and enhanced range of products, providing both wider application opportunities and improvement in product performance

Photoelectric Smoke Sensor



The 2251EM photo-electronic sensor is a plug in smoke detector combining a photo-optical sensing chamber with addressable analogue communications and microprocessor control. The 2251EM features an improved design of sensing chamber, linked to sophisticated processing circuitry which incorporates smoothing filters to help eliminate transient environmental noise conditions, which can be the cause of unwanted alarms.

The detector's performance is further enhanced by the integration of special algorithms, which automatically compensate for contamination of the sensing chamber, hence providing a consistent level of sensitivity and increased immunity to unwanted alarm conditions. Should the maximum compensation range be exceeded the detector will generate a unique signal to the fire alarm control panel indicating a requirement for maintenance.

The sensor can be configured for differing application environments by selecting a suitable alarm threshold from within an approved range. (Refer to system supplier data).

The 2251EM has two integral LEDs which provide local visual indication of the sensor status. These LED's provide a dual function. In the event on an alarm, they are switched ON continuously, and can also be programmed to either blink when polled by the panel or remain off during normal conditions. In addition to its integral LEDs, the 2251EM can be connected to a Remote LED indicator (standard feature).

The individual loop address of each 2251EM can be easily set and read, using the rotary decade address switches located on the rear of each sensor. The use of decimal address codes significantly reduces the potential for incorrect address selection.

Each sensor base includes a tamper resistant option which, when activated, prevents the removal of the sensor from its base without the use of a tool. Full circuit functionality can be easily confirmed on site by use of the sensor test switch. Operation of this magnetic switch will generate an alarm response to the fire alarm control panel, making system testing both convenient and simple.

Multi-Sensor



The 2251TEM Multi-Criteria Fire Sensor is a plug in fire detector combining optical smoke detection, heat detection and microprocessor control with Analogue Addressable communications.

For smoke detection, the 2251TEM incorporates an improved design of sensing chamber, linked to sophisticated processing circuitry incorporating smoothing filters to help eliminate transient environmental noise conditions, which can be the cause of unwanted alarms.

The detector's performance is further enhanced by the integration of special algorithms, which automatically compensate for contamination of the sensing chamber, hence providing consistent level of sensitivity and increased immunity to unwanted alarm conditions. Should the maximum compensation range be exceeded the detector will generate a unique signal to the fire alarm control panel indicating a requirement for maintenance.

The thermal detection function features single thermistor technology with a linear temperature response.

Special algorithms are used to process the inputs from both optical and thermal functions, before an alarm decision is made.

In addition to the standard fixed alarm thresholds, the detector can be programmed to operate using an "Auto-learn" feature. When operating in this mode the sensitivity of the detector will automatically adjust to short term changes in its environment, reducing the potential for unwanted alarms occurring through local activities within the protected space. In areas where the normal daytime activities are likely to create unwanted alarms, the detector can be programmed to operate in a "Heat only" mode, automatically reverting to optical-thermal operation during the unoccupied period. The 2251TEM is thus able to offer performance flexibility coupled with superior environmental stability.

The 2251TEM has two integral RED LEDs which provide local visual indication of the sensor status. These LED's provide a dual function. In the event of an alarm, they are switched ON continuously, and can also be programmed to either blink when polled by the panel or remain off during normal conditions. In addition to its integral LEDs, the 2251TEM can be connected to a Remote LED indicator (standard feature).

Each sensor base includes a tamper resistant option which, when activated, prevents the removal of the sensor from its base without the use of a tool. Full circuit functionality can be easily confirmed on site by use of the sensor test switch. Operation of this magnetic switch will generate an alarm response to the fire alarm control panel, making system testing both convenient and simple.

Thermal Sensor



Model 5251EM intelligent fixed temperature (Class A1S) sensors use a state-of-the-art single thermistor sensing circuit to provide early warning of developing fires. These sensors are designed for open area protection and must only be connected to control panels that use a compatible proprietary analogue addressable communication protocol for monitoring and control.

Two LEDs on each sensor light to provide a local 360° visible sensor indication. The LEDs can be latched on by code command from the control panel for an alarm indication. The LEDs can also be unlatched to the normal condition by code command. Remote LED indicator capability is available as an optional accessory wired to the standard base terminals.

It is recommended that the sensor be removed from its mounting base for easier cleaning and that sensors be cleaned at least once a year. Use a vacuum cleaner to remove dust from the sensing chamber.

Model 5251REM intelligent rate of rise temperature (Class A1R) sensors use a state-of-the-art single thermistor sensing circuit to provide early warning of developing fires. These sensors are designed for open area protection and must only be connected to control panels that use a compatible proprietary analogue addressable communication protocol for monitoring and control.

Two LEDs on each sensor light to provide a local 360° visible sensor indication. The LEDs can be latched on by code command from the control panel for an alarm indication. The LEDs can also be unlatched to the normal condition by code command. Remote LED indicator capability is available as an optional accessory wired to the standard base terminals.

Model 5251HTEM intelligent fixed temperature (Class BS) sensors use a state-of-the-art single thermistor sensing circuit to provide early warning of developing fires. These sensors are designed for open area protection and must only be connected to control panels that use a compatible proprietary analogue addressable communication protocol for monitoring and control.

Two LEDs on each sensor light to provide a local 360° visible sensor indication. The LEDs can be latched on by code command from the control panel for an alarm indication. The LEDs can also be unlatched to the normal condition by code command. Remote LED indicator capability is available as an optional accessory wired to the standard base terminals.