

# SERIES 200 plus

Temperature Sensors Models 5251EM, 5251HTEM and 5251REM

# System

# **Product Overview**

#### Features

- Compatible with existing System Sensor protocol
- Microprocessor controlled to give a rapid and linear response
- Panel selectable static sensitivity settings (58PC or 78PC)
- Extended Temperature range
- Stable communication with high noise immunity
- Twin LED indicators providing 360P visibility
- Rotary decade address switches
- Tamper-Resistant (standard feature)
- Built in test switch
- Third party certified to EN54 5:2000 (Amendment 1)



#### Description

The 5251 range of static element and "rate of rise" temperature sensors provide solutions for a wide range of applications.

The 5251EM and 5251HTEM are fixed temperature analogue addressable sensors employing low mass thermistors and microprocessor technology for fast response and linear temperature sensing. Their linear response allows these sensors to be used to signal temperatures over the range of 58PC (Class A1S) to 78PC (Class BS).

The 5251REM uses the same thermistor and microprocessor technology to provide an alarm when the rate of rise in temperature exceeds 10PC/minute (typical) or if the temperature exceeds a threshold of 58PC (Response Class A1R).

All of the 5251 detectors have two integral alarm 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 5251EM can be connected to a Remote LED indicator (standard feature).

The individual loop address of each 5251EM 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.

All System Sensor products are covered by our extended 3 year warranty.

### 5251EM, 5251HTEM and 5251REM Thermal Sensors

LEDs Magnet Test Position Mark
<b>∢</b> Ø102mm →

# **Response Classification**

5251EM	5251REM	5251HTEM
Class A1S	Class A1R	Class BS
Electrical Specifications		
Operating Voltage Range	Maximum Standby Current	Maximum Average Standby Current 300µA (One Communication each 5 seconds with LED blink enabled)
15 to 32Vdc	200µA at 24Vdc (no communications)	
Maximum Alarm Current (LED On)		
7mA at 24Vdc		
<b>Environmental Specifications</b>		
Operating Temperature Range	Short duration and storage	Humidity 10 to 93% Relative Humidity (non-condensing)
-20°C to 60°C	-30°C to 80°C	
Mechanical Information		
Height	Diameter	Weight
51mm installed in B501 base	102mm installed in B501 base	78g
Max Wire Gauge for Terminals	Colour	Material
2.5mm <sup>2</sup>	Pantone Warm Grey 1C	Bayblend FR110

# **Product Range**

#### **Compatible Bases**

B500 Series (B501, B501DG, B524RTE, B524IEFT-1)

# Other Devices in range

Please refer to other Series 200 plus datasheets

#### Notes

- 1. For Class A1S and A1R Sensors maximum ambient temperature should not exceed 45PC to avoid unwanted alarm conditions being triggered.
- 2. For Class BS Sensor maximum ambient temperature should not exceed 68PC to avoid unwanted alarm conditions being

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