

**SERIES 300**

Rate of Rise & Fixed Temperature Thermal Detector  
Model 5351E

**Product Overview****Features**

- Low profile design
- Low current draw
- Backward compatible with Series 100 detector range of bases
- Wide operating voltage 8 to 30VDC
- Bi-colour LED detector status indicator
- Programmable sensitivity
- Addressable feature
- Advanced maintenance features via remote hand-held test unit
- Range of detector bases available
- Approved to EN54 – 5:2000 Class A1R (Amendment 1)
- Extended warranty

**Description**

The 5351E thermal detector forms part of the Series 300 range of conventional detectors. This range of detectors has been produced using the latest in manufacturing and design techniques, pushing out the boundaries of existing conventional detector technology. With its multitude of innovative features, the Series 300 is a detector which 'acts conventionally, thinks intelligently'.

The 5351E thermal detector incorporates an Application Specific Integrated Circuit (ASIC). Combined with the latest in thermal element technology the detector provides efficient and accurate detection of fires, especially in environments such as bars or kitchens where smoke detectors are inappropriate due to the high level of airborne contamination.

The 5351E and other detectors in the Series 300 range are backward compatible with the Series 100 detector bases, thus providing the capability to upgrade, extend and maintain existing Series 100 installations.

The 5351E detector incorporates a bi-colour LED indicator. The integral LED changes colour according to the detector's status - Green = Normal, Red = Alarm. This benefits the user by providing clear, instant visual indication of the detector's condition. The Green LED can be programmed for blink/no blink operation.

The remote hand-held programming unit can also be used in conjunction with the Series 300 range of detectors to gain access to other advanced features. The features available include: read/write last maintenance date, read value of thermal element and perform an alarm test.

Each unit can be given a unique address that will be displayed on the S300ZDU whenever the detector is in alarm.

All the features via the hand-held programming unit are achieved effectively and effortlessly without the need to remove the detector or having to gain direct physical access (other than by the use of 'No Climb Products' or similar servicing tool), saving valuable commissioning/maintenance time.

They provide the end user with the confidence to know that his system is being regularly serviced and that it is operating at its optimum level, with minimum disruption to his own business activities.

## Architect/Engineer Specifications

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### 5351E Rate of Rise & Fixed Temperature Thermal Detector

In addition to the comprehensive programming tool, a simple laser based alarm test unit is also available. The coded signal transmitted by this device can instruct the detector to generate a full alarm condition at a range of up to 5 metres from the detector, and is an ideal tool for initial commissioning and routine system testing.

A variety of detector bases can be used with the 5351E detector, providing application flexibility and compatibility with a wide range of Fire Alarm Control Panels. All bases are fitted with a shorting spring to permit circuit testing prior to fitting the detector and have a tamper resistant feature, which when activated prevents removal of the detector without the use of a tool.

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

## Electrical Specifications

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<b>Operating Voltage Range</b>	<b>Typical Standby Current @ 25 °C</b>	<b>Maximum Permissible Alarm Current (LED On)</b>
8 to 30VDC (Nominal 12/24VDC)	60µA @ 24VDC (LED no blink)	80mA @ 24VDC (Limited by panel)

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## Environmental Specifications

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<b>Operating Temperature Range</b>	<b>Humidity</b>
-30 °C to +70 °C	5 to 95% Relative Humidity (non condensing)

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## Mechanical Information

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<b>Height</b>	<b>Diameter</b>	<b>Weight</b>
48mm (plus 9mm for B401 base)	102mm	105g (plus 60g for B401 base)
<b>Wire Gauge for Terminals</b>	<b>Colour</b>	<b>Material</b>
0.75mm <sup>2</sup> to 2.5mm <sup>2</sup>	Pantone, warm grey 1C	Bayblend FR110

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## Product Range

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### Bases (see notes)

B401 Standard Base	B401SD Standard base with schotty diode
B401R Resistor base with 470 ohm resistor	B401RSD Standard base with 470 ohm resistor and Shottky diode
B401RM Standard recess base with 470 ohm resistor	B401DG Deep base
B401DGR Deep base with 470 ohm resistor	B401DGSD Deep base with Shottky diode
B312NL 12V non-latching relay base	B312RL 12V latching relay base
B324RL 24V latching relay base	

### Accessories

S300RPTU Remote Programming and Test Unit	S300RTU Remote Test Unit
S300SAT Remote Programming Interface Unit	S300ZDU Zonal Display Unit

### Other Detectors

2351E, 2351TEM, 4351E, 5351TE

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### Other Detectors Notes

1. To avoid unwanted alarm conditions being triggered by class A1S and A1R detectors maximum ambient operating temperature should not exceed 45 °C.
2. Bases with other resistor values are available to suit the requirements of most Fire Alarm Control Panels.

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