



Product Data Sheet

DP652

Optical smoke detector

General

The 650 Series conventional detectors are designed for the highest effectiveness utilising the latest technology. A wide operating voltage (9 to 33 VDC) allows them to be used on any security system.

Ionisation Detectors

The detector sensor consists of 2 chambers - an open outer chamber and a semi-sealed reference chamber. As smoke enters the open chamber, the voltage difference between the chambers is measured and compared to a pre-set trigger level for alarm. An integrating ionisation detector, suitable for use in areas where transient levels of smoke may be present, is also available.

Optical Smoke Detectors

These detectors use a pulsing LED and photo diode in a dark optical chamber. In the event of smoke from a fire entering the chamber, the light from the LED is scattered and registered by the photo diode.

Series 650 Heat Detectors

Heat detectors normally use a matched pair of thermistors (one exposed and one sealed) to sense heat. In case of fire, the exposed thermistor's temperature increases rapidly, causing the detector to change into the alarm state because of the imbalance. Rate-of-rise algorithms may detect the fire as the temperature increases, but a fixed upper temperature limit will force the detector into alarm if the rate of temperature increase has been too slow. The static only response heat detectors use only one thermistor and changes to the alarm state at a preset temperature.

Standard Base

The base enables detectors to be plugged in without any need for force - particularly useful when fitting to suspended ceilings. The base has a "one way only" fit and are lockable. They contain no electronic parts that could be damaged during installation. The detectors are polarity insensitive and bases are easy to wire with an earth connector.



Standard Features

- Advanced electronic technology
- Flashing LED option
- Polarity insensitive
- Common base
- Elegant slim-line design
- EN54 approved
- Magnetic test switch option
- Proven detection performance
- Can be used on security systems
- Wide range of bases available

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Specifications

Size of detector (mm)	
Height	42
Diameter	100
Size of detector + base (mm)	
Height	50
Diameter	100
Supply voltage	9 - 33 VDC
Quiescent current at 24 V (typical)	40 µA (typical)
Alarm indication	LED
Normal operating temp. range (no icing)	-20°C to +60°C
Humidity (no condensation)	0 - 95%
Max. wind	Not affected
Remote alarm output current	17 mA
IP Rating	43

Ordering Information

Part No.	Description
DP652	Optical smoke detector
DB650	650 Series standard relay base
DB650R	650 Series auxiliary relay base
DB860	650/800 Series Standard Conventional Fire Detector Base
DB860D	650/800 Series Conventional Fire Detector Diode Base
DB864	860 Series Low Profile Relay Base