

ECO 1000

Photoelectric Smoke Detector
Model ECO1003

**Product Overview****Features**

- Low profile design
- Low current draw
- Automatic drift compensation
- Operates on 12 and 24VDC Systems
- Remote alarm test feature
- Easy Maintenance
- Range of detector bases available
- Remote LED Option
- Approved to EN54 – 7:2000 (Amendment 1)
- Extended warranty

**Description**

The ECO1003 photoelectric smoke detector belongs to System Sensor's ECO1000 range of detectors. ECO1000 is a range of conventional detectors, which have been produced using the latest in manufacturing technology and supplied with an array of advanced features, making them 'better by design'.

The ECO1003 photoelectric smoke detector uses a state of the art optical chamber combined with an application specific integrated circuit (ASIC) to provide quick and accurate detection of fires. A combination of the unique chamber design and other technically advanced features will significantly extend the service intervals before cleaning of the detector becomes necessary.

A laser-based hand held Remote Test Unit can be used in conjunction with the range of ECO1000 detectors for alarm test purposes. The unit transmits a coded message, preventing spurious alarms being generated by other laser-based devices. With a range of several metres, the hand held test unit provides a fast and simple way of remotely alarm testing the range of ECO1000 detectors and removes the need for any direct physical access to the detector by the user.

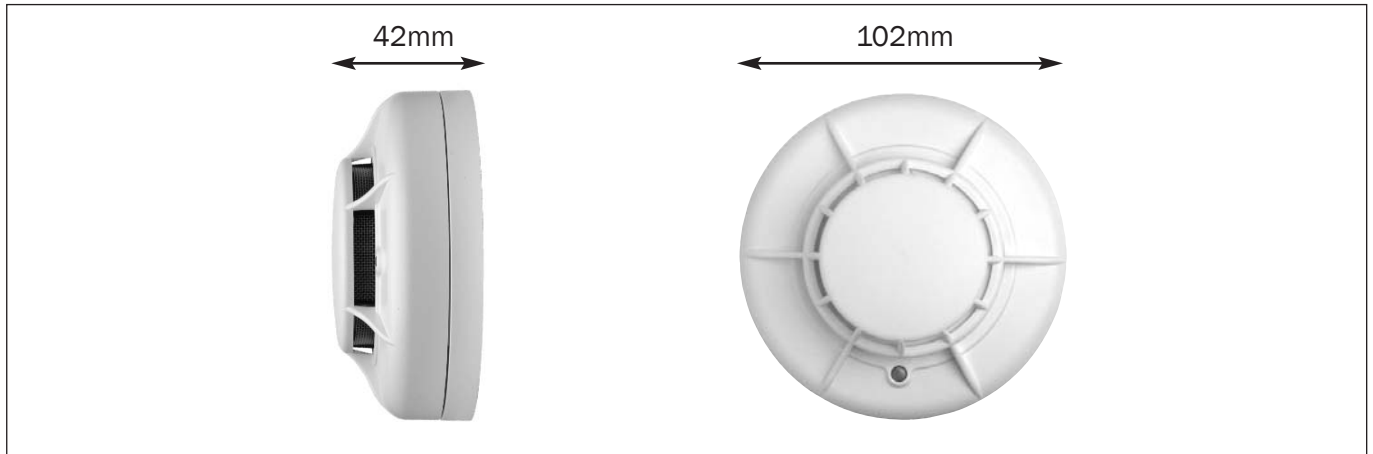
The ECO1003 detector has an integral LED, which illuminates to provide a local alarm signal. This latches on, and remains illuminated until the detector is reset by a momentary power interruption. An optional remote LED annunciator may be used to repeat any alarm signal.

A variety of detector bases can be used with the ECO1003 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.

Architect/Engineer Specifications

ECO1003 Photoelectric Smoke Detector



Electrical Specifications

Operating Voltage Range

8 to 30VDC (Nominal 12/24VDC)

Maximum Standby Current @25°C

45µA @ 24VDC

Maximum Permissible Alarm Current

80mA (current limited by control panel)

Environmental Specifications

Application Temperature Range

(see note)
-30°C to +70°C

Humidity

5% to 95% Relative Humidity
(non-condensing)

Mechanical Information

Height

32.5mm
(plus 9.5mm for standard base)

Diameter

102mm

Weight

75g (plus 45g for standard base)

Wire Gauge for Terminals

0.4mm² to 2.0mm²

Colour

Approximates to RAL9016

Material

ABS

Product Range

Bases

ECO1000B Standard Base

ECO1000R Resistor base 470 Ohm

ECO1000DB Deep base

ECO1000DBR Deep resistor base 470 Ohm

ECO1000BREL12L Relay base 12V Latching

ECO1000BREL24NL Relay base 24V Latching

ECO1000BSD Standard base with Schottky diode

ECO1000BRSD Resistor base 470 Ohm with Schottky diode

ECO1000DBSD Deep base with Schottky diode

ECO1000DBRSD Deep resistor base 470 Ohm with Schottky diode

ECO1000BREL12NL Relay base 12V Non-latching

Accessories

ECO1000RTU Remote Test Unit

Other Detectors

ECO1002 Photoelectric/Thermal Detector

ECO1004T 78°C Fixed Temperature Thermal Detector

ECO1005 Rate of Rise & 58°C Fixed Temperature Thermal Detector

ECO1005T 58°C Fixed Temperature Thermal Detector

Note

Bases with other resistor values are available to suit the requirements of most Fire Alarm Control Panels.

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