ECO 1000
Photoelectric Smoke Detector
Model ECO1003

SYSTEM SENSOR®

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)

LPCB 199m/01   **VdS** G201060   **C E** 0832-CPD-0064
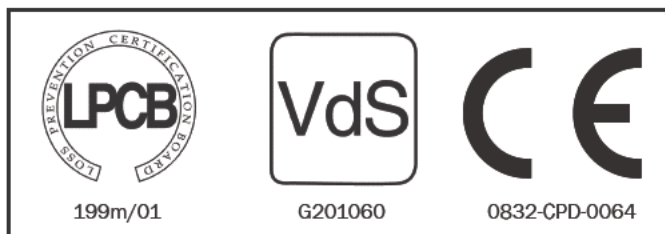
Description

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.

Architect/Engineer Specifications

ECO1003 Photoelectric Smoke Detector

42mm   102mm
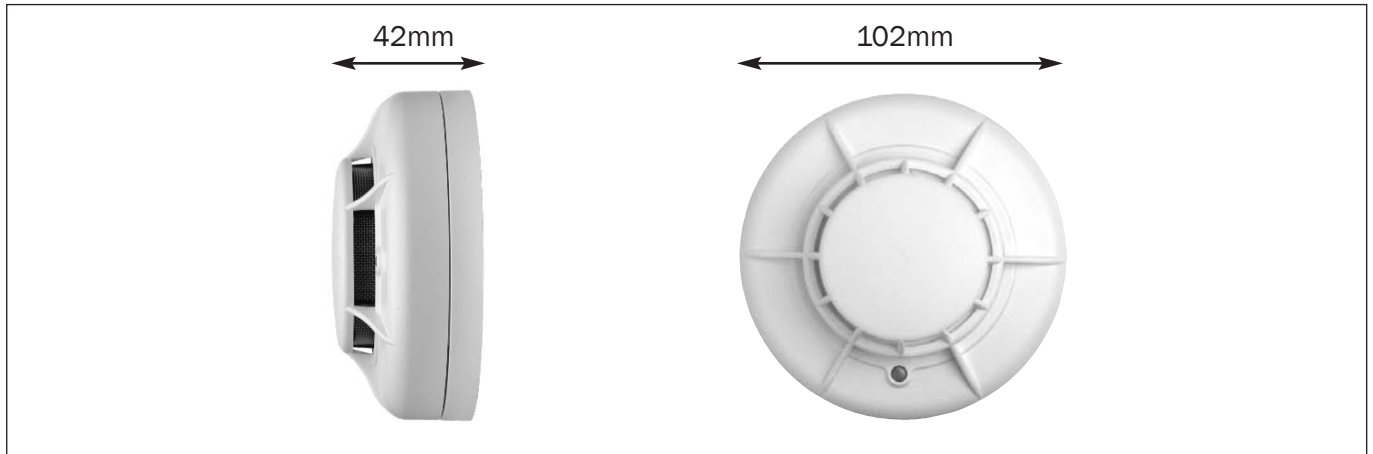
Electrical Specifications

Operating Voltage Range	Maximum Standby Current @25ÞC	Maximum Permissible Alarm Current
8 to 30VDC (Nominal 12/24VDC)	45µA @ 24VDC	80mA (current limited by control panel)

Environmental Specifications

Application Temperature Range (see note)	Humidity
-30ÞC to +70ÞC	5% to 95% Relative Humidity (non-condensing)

Mechanical Information

Height	Diameter	Weight
32.5mm (plus 9.5mm for standard base)	102mm	75g (plus 45g for standard base)
Wire Gauge for Terminals	Colour	Material
0.4mm² to 2.0mm²	Approximates to RAL9016	ABS

Product Range

Bases
ECO1000B Standard Base
ECO1000R Resistor base 470 Oohm
ECO1000DB Deep base
ECO100DBR Deep resistor base 470 Ohm
ECO1000BREL12L Relay base 12V Latching
ECO1000BREL24NL Relay base 24V Latching

ECO1000BSD Standard base with Shottky diode
ECO1000BRSD Resistor base 470 Ohm with Shottky diode
ECO1000DBSD Deep base with Shottky diode
ECO100DBRSD 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 78ÞC Fixed Temperature Thermal Detector
ECO1005 Rate of Rise & 58ÞC Fixed Temperature Thermal Detector
ECO1005T 58ÞC Fixed Temperature Thermal Detector

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