



## ECO2000 — cost-effective intelligent detection

### Main features

- A cost-effective alternative to conventional systems
- Plug and Play auto-configuration and set up
- All the benefits of analogue intelligent detection
- Optical and thermal detectors
- Wall mounting and detector base sounders
- Manual call point
- Input module
- Contractor friendly: easy installation
- User friendly: simple operation
- 64 addresses per loop
- Fault-tolerant
- Versatile and reliable
- Cable-share design for sounders and detectors
- Digital signal processing for false alarm immunity
- Automatic compensation for detector contamination



## Introduction

The new ECO2000 range is a highly cost-effective family of intelligent analogue detectors and associated products, extending the benefits of intelligent detection to smaller and less complex installations. Until now, a conventional system was preferred in this area owing to the incremental cost of an intelligent system.

ECO2000 reduces wiring and installation costs, gives higher detector performance and lower false alarm rates, providing increased security and protection for people and property. The range consists of an optical smoke detector, fixed temperature detector, call point, loop powered sounder and micro input module. Two sounders are available - a wall-mounted version or a discreet detector base sounder which can be mounted beneath the optical or thermal detector and base.

Installation and setup has been made as easy as possible. Up to 64 devices can be connected to a single loop, and "Plug and Play" auto-configuration eliminates the time required to address each device manually. Each detector, call point or module is automatically assigned an address on initial power-up.

Automatic zoning is achieved by simply adding resistors to the bases to indicate the last detector in each zone. Standard two wire unshielded cable may be used and all detectors and modules have short circuit isolation to give tolerance to wiring faults.

- Operating voltage: Nominal 24VDC, wide tolerance 15 — 30VDC
  - Detector height: 43mm
  - Detector diameter: 104mm
  - Single multi-function LED indicator.
- Detectors, modules and call points feature auto-addressing.
- All detectors, modules and call points can be designated as "end-of-zone" with an additional resistor in the base.
  - Sounders feature decade address switches for sounder group allocation

## Optical detector

The optical detector incorporates digital signal processing for optimum system performance. A microprocessor analyses the detector signal to eliminate spikes produced by dust particles and compensates for changes in detector sensitivity caused by dust contamination. This reduces the need for maintenance and increases the stability of the detector. If however, the detector chamber needs cleaning or replacement, a maintenance signal shows at the panel.

- Standby current: 140µA nominal
- Alarm current: 6.5mA maximum
- Maximum air velocity: 20m/s (4000 ft/min)
- Relative Humidity: 5 - 95% RH
- Operating temperature: -30 to +70°C

Meets prEN54 part 7

## Fixed temperature/rate-of-rise heat sensor

The fixed temperature detector also incorporates a rate-of-rise function set at 8°C/minute so that the alarm will be triggered as early as possible when a localised fierce fire occurs.

- Operating point: 58°C
- Standby current: 140µA
- Alarm current: 6.5mA
- Maximum air velocity: 20m/s
- Maximum Humidity: 95% RH
- Operating temperature: -30 to +70°C

Meets prEN54 part 5

## Input module

The input module monitors the external input connections for open circuit, short circuit and alarm.

- Standby current: 140µA
- Alarm current: 6.5mA
- Maximum Humidity: 95% RH
- Operating temperature: -30 to +70°C



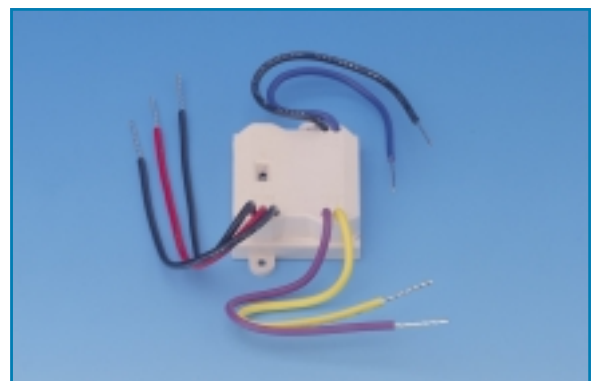
ECO2000 family



Optical detector



Thermal detector



Input module

## Manual call point

The manual call point is fitted with the input module to enable interconnection to the control panel. It is suitable for flush or surface mounting into any standard single gang mounting box.

- Standby current: 140µA
- Alarm current: 6.5mA
- Maximum Humidity: 95% RH
- Operating temperature: -30 to +70°C



Manual call point

## Loop powered wall mounted sounder

Loop-powered sounders are allocated a group by means of easy-to-use decade switches on the back of the sounder. In most systems, sounders are activated simultaneously, so a common address of "00" can be used. Grouping sounders onto a common address simplifies system configuration even when a staged evacuation is required.

- Sound Pressure level: 100dB(A) Maximum Volume  
93dB(A) Medium Volume  
87dB(A) Minimum Volume
- Standby current: 600µA
- Alarm current: 2.75mA Minimum Volume  
5.0mA Medium Volume  
12.0mA Maximum Volume
- Maximum Humidity: 95% RH
- Operating temperature: -20 to +70°C



Wall mounted sounders

## Loop powered detector base sounder

The detector base sounder fits below the optical or thermal detector, simplifying wiring and reducing installation time. Ideal for use in hotels and other applications where legislation requires a sounder to be installed in each protected room.

- Sound Pressure level: 90dB(A) Maximum Volume  
85dB(A) Medium Volume  
80dB(A) Minimum Volume
- Standby current: 600µA
- Alarm current: 4mA Minimum Volume  
9mA Medium Volume  
12mA Maximum Volume
- Maximum Humidity: 95% RH
- Operating temperature: -20 to +70°C



Detector base sounder

The world's largest manufacturer of intelligent and conventional smoke detectors

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