

# CANARY 'Smart' Gas Monitoring System

Model 1000 3000 8000 Controller



*The CANARY 'Smart' Gas monitoring system controller models 1000, 3000 & 8000 can be used for occupational or environmental monitoring.*

*Part Per Million levels of*

*toxic gases, general*

*hydrocarbon*

*vapours and*

*physical*

*parameters*

*such as wind*

*speed and*

*temperature*

*can be*

*measured,*

*external*

*devices*

*activated or retransmitted to a*

*building management system*

*or PLC.*

The Canary 'Smart' controller utilises a 2 or 3 wire loop powered operation. Substances such as Oxygen, Carbon Monoxide, Carbon Dioxide, Chlorine, Hydrogen Sulphide, Ethylene, Ethylene Oxide, Hydrogen, Hydrogen Cyanide, Hydrogen Fluoride, Phosphine, Arsine, Ozone or Sulphur Dioxide are just some of the hazardous chemicals that can be monitored.

The Canary 'Smart' range of controllers may include data logging and activation of remote warning devices such as warning lights or sirens. Sensors plug directly onto a surface mount PCB which minimises the potential for faults which might occur with other products.

The Canary 'Smart' controllers models 8000, 3000, and 1000 will accept eight, three and one sensor inputs respectively. They can be

Current isolation & 12 bit data-logger output terminations are optional. The Canary 'Smart' controllers are specifically designed for use with applications requiring the switching of control variables, such as in car park air changes for compliance with AS 1668 Part2. Unlike some air quality detection sensors using non-linear techniques and offered as low cost monitors, our Canary product range typically uses electrochemical sensors allowing control,

repeatability and reliability.

Our sensors are not cross sensitive to other

gases which typically co-exist with

target

gases, whilst still

remaining a low cost

solution. The Canary 'Smart'

controller can be programmed to operate as a scanning monitor or an arithmetic process monitor. In the scanning mode the instrument scans and displays each input at a programmable rate. The arithmetic mode allows input combining and manipulation to occur before retransmission to a remote control input.

configured to provide local audible/visual alarms as required and either individual or up to three common NO/NC control relay contacts for switching external devices such as ventilation fans on/off in underground car parks.

All units feature microprocessor scanning, LED displays, IP65 enclosure, 240VAC mains power, Fault, Low & Hi alarm controls and local audible & visual warnings.



The Canary 'Smart' Single & Multi Channel Control Units are fitted with a large LED display of PPM gas concentrations and local user settable audible/visual warnings for both 2 and 3 wire transmitters. NC/NO relay contacts, mains or DC power supply with optional retransmission of 4-20mA proportional output from linear, arithmetic and linearised inputs. All housed in an Ip56 wall mount enclosure.

## Features

- Scanning/Control Units with Single (1000), Three (3000) and Eight (8000) channel inputs.
- Large 5 digit LED display for ease in reading.
- Many electrochemical gas sensing options are available.
- Sensors plug directly onto a surface mount transmitter PCB.
- All microprocessor controlled
- 240V, 110V Mains or 24 VDC input.
- 2 year guarantee on the LED display

- Options include optically isolated retransmission.
- Variable transmitter supplies from 2 to 24VDC ( $\pm 12V$ ) isolated.
- The units have flexible pushbutton operation for calibration and programming
- Dimensions: 180mm (w) x 110mm (h) x 165mm(d)
- Mounting holes: 165mm (w) x 95mm (h)  
Alternative mounting holes: 120mm (w) x 50mm (h).
- Audible and visual warnings standard.
- Programmable alarm or relay & hysteresis variables standard.

## Accessories

- Flashing signs activated by the control unit..
- Recalibration & maintenance agreement.
- Current isolation or IS barriers can be provided if required.
- 'Trend' data-logging and software package..
- Remote audible/visual warning lights, alarms and buzzers.
- Field portable set of NIST traceable gas mixtures for local calibrations.

## 'Smart' Controller

### Description

Canary 'Smart' Controllers may be programmed to operate as a 1,3 or 8 channel input scanning monitor. Each input is at a programmable rate. The arithmetic mode allows the three input model (Ch1, Ch2 & Ch3) to be combined using a versatile formula of user variables.

The display accepts inputs of 4-20mA or millivolts with the resultant display reading directly in ppm or percent Volume or Lower Explosive Limit (LEL). A programmable digital filter improves low range stability. The display brightness can be adjusted. Full 3 way electrical

isolation between power supply, input voltage/current and retransmission eliminates grounding and common voltage problems.

Maximum, minimum, peak hold functions, security lockout and pushbutton zero are available.



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