

# MM2000

ADDRESSABLE GAS DETECTION SYSTEM



## ADDRESSABLE GAS DETECTION SYSTEM

MM2000™ is an intelligent addressable gas detection system designed to provide flammable, toxic and asphyxiant gas detection in all types of individual applications.

The MM2000™ system operates on a single 4-core cable having the capacity to monitor from 1 to 32 addressable sensors. The control system provides local indication of the measured parameters and alarm conditions together with relay contacts to shut down machinery or to alert operators in other locations

### THE BENEFITS

- Loop sensor cable for low cost installation
- One man calibration
- Compact panel for the smallest control rooms
- No moving parts
- Continuous monitoring of all sensors
- Relay contacts for shutting down or alerting remote systems

### TECHNICAL SPECIFICATIONS

MM2000™ Controller	
SENSOR POINTS:	1 to 32
POWER:	24V dc, 110V/220V ac 50/60Hz
INPUTS:	Flammable, toxic (e.g. H <sub>2</sub> S), oxygen
DISPLAY:	4 line alphanumeric LCD indicating: Sensor address; gas type; concentration (rising or falling); peak hold; alarm status; system fault; line fault; line inhibit
POWER:	Twin Green LEDs
ALARM:	Twin Red LEDs
FAULT:	Twin Amber LEDs
USER INTERFACE:	Menu driven via LCD 6No. panel mounted membrane push buttons with security
OUTPUTS:	<ul style="list-style-type: none"> <li>• 3 alarm levels per channel;</li> <li>• 16 user programmable volt-free SPCO relays for shutting down air conditioning or other machinery as required N/E or N/DE, latched or unlatched</li> <li>• Common fault relay SPCO N/E or N/DE</li> <li>• Mains fail relay SPCO N/E or N/DE 9way</li> <li>• D-Type connector ASC11RS232 comms</li> </ul>
INGRESS PROTECTION:	IP52

## MM2000™ Controller

LOCAL ALARM:	Internal buzzer for alarm/fault with mute
CABLE DETAILS:	<ul style="list-style-type: none"> <li>Main network – 4-core (2 power – 2 comms)</li> <li>1.5mm<sup>2</sup> screened max &lt; 500m</li> </ul>
ENVIRONMENTAL:	Complies with Class Criteria
TEMPERATURE:	-40°C to +55°C
PANEL DIMENSIONS:	315mm (W) x 260mm (H) x 75mm (D)
FIXING DETAIL:	<ul style="list-style-type: none"> <li>4 x M4 on 228mm (H) x 278mm (D)</li> <li>On rectangular template</li> </ul>
WEIGHT:	3.4kg
CABLE ENTRY:	Top, bottom or rear

## MM1000™ Flammable Gas Detector

CERTIFICATION:	EEx d IIC T6 – zones 1 and 2
RANGE FLAM:	0 - 100% LEL
RANGE H2S:	0-50ppm, 0-100ppm
RANGE O2:	0-25% v/v
RANGE CO:	0-300ppm, 0-500ppm
SCS CERT NO.:	EX98EII87X / 03ATEX1176X
OPERATION:	Continuous diffusion
HOUSING MATERIAL:	316 stainless steel
DIMENSIONS:	33mm (diameter) x 33mm (L)
ENVIRONMENTAL DATA:	Tested on ENV2 (Lloyds test specification 1)
TEMPERATURE:	-40°C to +55°C
WEIGHT:	165g
ACCESSORIES:	Dust and spray protector, duct mount kit
SENSOR JUNCTION BOX CERTIFICATION:	EEx d IIC T6
HOUSING MATERIAL:	Galvanised cast iron
DIMENSIONS:	126mm (diameter) x 86mm (D)
FIXING DETAILS:	2 x M6 appropriate fasteners
CABLE ENTRY:	Top M20 x 1.5P
WEIGHT:	2kg
SENSOR CABLE:	4-core 1.5mm <sup>2</sup> screened and unarmoured marine approved