



Series 3000 MkII SPECIFICATIONS

2-wire loop powered toxic and oxygen gas detector for use in potentially explosive atmospheres

Series 3000 MkII detector						
Use	Rugged and reliable gas detector for the protection of personnel from toxic and oxygen gas hazards. Suitable for use in Zone 1 or 2 hazardous areas and North American Class I and II Division 1 or 2 areas.					
Detectable gases						
Gas	Formula	Selectable full scale range	Default range	Operating Temperature* Min Max		Lower Detection Limit
Oxygen	O ₂	25.0%/Vol only	25.0% Vol	-40°F/-40°C	131°F/55°C	3.5% Vol
Carbon Monoxide	CO	100 to 1,000 ppm	300 ppm	-40°F/-40°C	131°F/55°C	15 ppm
Hydrogen Sulfide	H ₂ S	10 to 50 ppm	15 ppm	-40°F/-40°C	131°F/55°C	1.5 ppm
Hydrogen Sulfide	H ₂ S	50 to 500 ppm	100 ppm	-4°F/-20°C	131°F/55°C	3 ppm
Chlorine	Cl ₂	5 to 20 ppm	5 ppm	14°F/-10°C	131°F/55°C	0.6 ppm
Ozone (pending)	O ₃	0 to 0.4 ppm only	0.4 ppm	-4°F/-20°C	131°F/55°C	
Sulfur Dioxide	SO ₂	5.0 to 20.0 ppm	15 ppm	-40°F/-40°C	131°F/55°C	0.6 ppm
Chlorine Dioxide	ClO ₂	0 to 1 ppm only	1 ppm	-4°F/-20°C	131°F/55°C	0.03 ppm
Nitrogen Monoxide	NO	0 to 100 ppm	100 ppm	-4°F/-20°C	131°F/55°C	3 ppm
Nitrogen Dioxide	NO ₂	5 to 50 ppm	10 ppm	-4°F/-20°C	131°F/55°C	1.5 ppm
Hydrogen	H ₂	0 to 1000 ppm only	1000 ppm	-4°F/-20°C	131°F/55°C	30 ppm
Hydrogen	H ₂	0 to 10,000 only	10,000 ppm	-4°F/-20°C	131°F/55°C	300 ppm
Hydrogen Chloride	HCl	10 to 20 ppm	10 ppm	-4°F/-20°C	131°F/55°C	0.3 ppm
Hydrogen Cyanide (pending)	HCN	0 to 20 ppm only	20 ppm	-4°F/-20°C	131°F/55°C	
Hydrogen Fluoride	HF	0 to 12 ppm only	12 ppm	-4°F/-20°C	131°F/55°C	0.4 ppm
Ammonia**	NH ₃	50 to 200 ppm	200 ppm	-4°F/-20°C	122°F/50°C***	6 ppm
Ammonia**	NH ₃	200 to 1,000 ppm	1,000 ppm	-4°F/-20°C	104°F/40°C	30 ppm
Phosphine	PH	0 to 1.2 ppm only	1.2 ppm	-4°F/-20°C	131°F/55°C	0.04 ppm
*Performance may vary depending on sensor type.						
**Suitable for applications without NH ₃ ambient background concentrations only.						
***+131°F/+55°C intermittent.						
Electrical						
Connections and power	2-wire loop powered; 17Vdc (+/-10%) to 24Vdc (max) operation; 22mA max. over range					
Recommended cable	2-wire with shield (90% coverage) or conduit; 0.5mm ² (20AWG) to 2.0mm ² (14AWG)					
Signal	0-100%FSD 4-20mA; Fault = 3mA; Calibration due selectable off or 3mA Max. over range 22mA; Inhibit (toxic sensors) = Selectable 3mA or 4mA Inhibit; (Oxygen sensors) = Selectable 3mA or 17.4mA					
Construction						
Material	Transmitter: Epoxy painted aluminum alloy LM25 or 316 stainless steel Sensor: 316 stainless steel with PTFE filter					
Maximum Dimensions	6.4 x 7.9 x 3.9 inches; 164 x 201 x 99mm					
Weight	Aluminum alloy: 3.75 lbs./1.79 kg; stainless steel: 8.16 lbs./3.7 kg					
Environmental						
IP rating	IP66 (EN60529), NEMA 4X					
Operating humidity	Continuous 20-90% RH (non-condensing); Intermittent 0-99% RH (non-condensing)					
Operating pressure	90-110kPa					
Storage conditions	59°F to 86°F (15°C to 30°C) 30-70%RH (non-condensing)					
Certification	UL/c-UL Class I, Div 1 & 2, Groups B, C & D; Class II, Div 1, Groups E, F, G; Class II, Div 2, Groups F & G, Class I Zone 1, Group 2B + H2 Hazardous Locations ATEX: II 2 (1) G Ex d [Ia] IIB+H2 T4 (T _{amb} -4°F to +131°F/-20°C to +55°C) IECEX Ex d [Ia] IIB + H2 T4					

Please Note:
While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.