



## Series 3000 MkII SPECIFICATIONS

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

Series 3000 MkII detector						
<b>Use</b>	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.					
<b>Detectable gases</b>						
Gas	Formula	Selectable full scale range	Default range	Operating Temperature* Min Max		Lower Detection Limit
Oxygen	O <sub>2</sub>	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 <sub>2</sub> S	10 to 50 ppm	15 ppm	-40°F/-40°C	131°F/55°C	1.5 ppm
Hydrogen Sulfide	H <sub>2</sub> S	50 to 500 ppm	100 ppm	-4°F/-20°C	131°F/55°C	3 ppm
Chlorine	Cl <sub>2</sub>	5 to 20 ppm	5 ppm	14°F/-10°C	131°F/55°C	0.6 ppm
Ozone (pending)	O <sub>3</sub>	0 to 0.4 ppm only	0.4 ppm	-4°F/-20°C	131°F/55°C	
Sulfur Dioxide	SO <sub>2</sub>	5.0 to 20.0 ppm	15 ppm	-40°F/-40°C	131°F/55°C	0.6 ppm
Chlorine Dioxide	ClO <sub>2</sub>	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 <sub>2</sub>	5 to 50 ppm	10 ppm	-4°F/-20°C	131°F/55°C	1.5 ppm
Hydrogen	H <sub>2</sub>	0 to 1000 ppm only	1000 ppm	-4°F/-20°C	131°F/55°C	30 ppm
Hydrogen	H <sub>2</sub>	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 <sub>3</sub>	50 to 200 ppm	200 ppm	-4°F/-20°C	122°F/50°C***	6 ppm
Ammonia**	NH <sub>3</sub>	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 <sub>3</sub> ambient background concentrations only.						
***+131°F/+55°C intermittent.						
<b>Electrical</b>						
<b>Connections and power</b>	2-wire loop powered; 17Vdc (+/-10%) to 24Vdc (max) operation; 22mA max. over range					
<b>Recommended cable</b>	2-wire with shield (90% coverage) or conduit; 0.5mm <sup>2</sup> (20AWG) to 2.0mm <sup>2</sup> (14AWG)					
<b>Signal</b>	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					
<b>Construction</b>						
<b>Material</b>	Transmitter: Epoxy painted aluminum alloy LM25 or 316 stainless steel Sensor: 316 stainless steel with PTFE filter					
<b>Maximum Dimensions</b>	6.4 x 7.9 x 3.9 inches; 164 x 201 x 99mm					
<b>Weight</b>	Aluminum alloy: 3.75 lbs./1.79 kg; stainless steel: 8.16 lbs./3.7 kg					
<b>Environmental</b>						
<b>IP rating</b>	IP66 (EN60529), NEMA 4X					
<b>Operating humidity</b>	Continuous 20-90% RH (non-condensing); Intermittent 0-99% RH (non-condensing)					
<b>Operating pressure</b>	90-110kPa					
<b>Storage conditions</b>	59°F to 86°F (15°C to 30°C) 30-70%RH (non-condensing)					
<b>Certification</b>	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 <sub>amb</sub> -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.



Ex-Ox-Tox Gasdetectie  
Westerdreef 5V  
2152 CS Nieuw-Vennep  
Telefoon: 0252 620885  
E-mail: info@exotox.nl  
Website: www.exotox.nl