

# General Monitors<sup>®</sup> S5000 Gas Monitor

Extreme Durability. Anytime. Anywhere.



Simple retrofits have identical footprint and wiring to S4000 Gas Monitor series.


Wide operating temperature for extreme environments (-55°C to +75°C).

Bluetooth<sup>®</sup> wireless technology allows mobile device to act as HMI screen and controller via the X/S Connect App.



Instrument status indicators illuminate power, fault, and alarm conditions.

Dual sensor capability increases detection coverage without increasing CAPEX expense. Remote mount gas sensors up to 100 m away.

Intuitive user experience with industry-first touch-button interface or familiar magnetic interface.

 X/S Connect App

Reduce setup time by at least 50% with the X/S Connect App.

 GET IT ON Google Play  Download on the App Store

## Advanced Sensor Technology

POWERED BY  
**XCell<sup>®</sup>**  
SENSORS

WITH  
**TruCal<sup>®</sup>**  
TECHNOLOGY

- Patented XCell H<sub>2</sub>S and CO Sensors with TruCal technology extend calibration cycles for as long as 2 years, actively monitor sensor integrity, and compensate for environmental factors and electrochemical sensor drift.
  - **Diffusion Supervision** sends acoustic signal every 6 hours to check that sensor inlet isn't obstructed so gas can reach the sensor.
  - Worry-free operation—automatically self-checks four times per day.
- Three-year warranty and five-year expected life for XCell Sensors.
- **SafeSwap** enables safe and quick XCell Sensor replacement without powering off gas detector.

### Applications

- Compressor stations
- LNG/LPG processing and storage
- CNG maintenance facilities
- Oil well logging
- Drilling and production platforms
- Petrochemical
- Fuel loading facilities
- Refineries



**SafeSwap<sup>®</sup>**

SAFEGUARDING  
**PEOPLE, PLACES, & THE PLANET**

# General Monitors S5000 Gas Monitor Sensor Specifications



## ELECTROCHEMICAL SENSORS

Gas	Default Range	Selectable Full Scale Range	Resolution	Response Time*		Repeatability	Zero Drift	Operating Temperature		Sensor Type	Sensor Life	Warranty	Classification
				T50	T90			Min	Max				
Ammonia - 100	0 - 100 ppm	25 - 100 ppm	0.1 ppm	< 20 Sec	< 60 Sec	< +/- 1%	<1% FS / Month	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 2
Ammonia - 1000	0 - 1000 ppm	190 - 1000 ppm	10 ppm	< 20 Sec	< 300 Sec	< +/- 15%	<1% FS / Month	-30°C (-22°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 2
Carbon Monoxide - 100	0 - 100 ppm	10 - 1000 ppm	1 ppm	< 3 Sec	< 9 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Carbon Monoxide - 500	0 - 500 ppm	10 - 1000 ppm	1 ppm	< 3 Sec	< 9 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Carbon Monoxide - 1000	0 - 1000 ppm	10 - 1000 ppm	1 ppm	< 3 Sec	< 9 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Carbon Monoxide - H <sub>2</sub> Resistant	0 - 100 ppm	10 - 100 ppm	1 ppm	< 3 Sec	< 9 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Chlorine - 5	0 - 5 ppm	1 - 20 ppm	0.1 ppm	< 5 Sec	< 12 Sec	< +/- 1%	<1% FS / Month	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 2
Chlorine - 10	0 - 10 ppm	1 - 20 ppm	0.1 ppm	< 5 Sec	< 12 Sec	< +/- 1%	<1% FS / Month	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 2
Chlorine - 20	0 - 20 ppm	1 - 20 ppm	0.1 ppm	< 5 Sec	< 12 Sec	< +/- 1%	<1% FS / Month	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 2
Chlorine Dioxide	0-3 ppm	0.5 - 3.0 ppm	0.01 ppm	< 12 Sec	< 30 Sec	< +/- 15%	<1% FS / Month	-40°C (-40°F)	50°C (122°F)	XCell	5 Years	3 Years	Div/Zone 2
Ethylene Oxide	0 - 10 ppm	1 - 10 ppm	0.1 ppm	< 50 Sec	< 140 Sec	< +/- 15%	<2% FS / Month	-20°C (4°F)	40°C (104°F)	Echem	2 Years	1 Year	Div/Zone 2
Hydrogen	0 - 1000 ppm	250 - 1000 ppm	10 ppm	< 40 Sec	< 185 Sec	< +/- 10%	<1% FS / Month	-30°C (-22°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 1
Hydrogen Chloride	0 - 50 ppm	25 - 50 ppm	1 ppm	< 30 Sec	< 120 Sec	< +/- 35%	<1% FS / Month	-30 C (-22 F)	40°C (104°F)	Echem	2 Years	1 Year	Div/Zone 2
Hydrogen Cyanide	0 - 50 ppm	25 - 50 ppm	1 ppm	< 8 Sec	< 30 Sec	< +/- 15%	<1% FS / Month	-20°C (-4°F)	40°C (104°F)	Echem	2 Years	1 Year	Div/Zone 1
Hydrogen Fluoride	0 - 10 ppm	5 - 10 ppm	0.1 ppm	< 60 Sec	< 90 Sec	< +/- 15%	<2% FS / Month	0°C (32°F)	50 C (122 F)	Echem	2 Years	1 Year	Div/Zone 2
Hydrogen Sulfide - 10	0 - 10 ppm	10 - 100 ppm	0.1 ppm	< 7 Sec	< 23 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Hydrogen Sulfide - 50	0 - 50 ppm	10 - 100 ppm	0.1 ppm	< 7 Sec	< 23 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Hydrogen Sulfide - 100	0 - 100 ppm	10 - 100 ppm	0.1 ppm	< 7 Sec	< 23 Sec	< +/- 1%	<1% FS / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Hydrogen Sulfide - 500	0 - 500 ppm	20 - 500 ppm	1 ppm	< 20 Sec	< 60 Sec	< +/- 10%	<1% FS / Month	-40°C (-40°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 1
Nitric Oxide	0 - 100 ppm	2.5 - 100 ppm	0.5 ppm	< 5 Sec	< 20 Sec	< +/- 15%	<1% FS / Month	-30°C (-22°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 1
Nitrogen Dioxide	0 - 10 ppm	1.5 - 10 ppm	0.1 ppm	< 30 Sec	< 60 Sec	< +/- 10%	<1% FS / Month	-40°C (-40°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 2
Oxygen/Oxygen (FM)	0 - 25%	5 - 25%	0.10%	< 6 Sec	< 11 Sec	< +/- 1% Vol	<0.2 % Vol / Year	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 1
Oxygen (Low)	0 - 25%	2 - 25%	0.10%	< 10 Sec	< 30 Sec	< +/- 10%	<1% FS / Month	-30°C (-22°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 1
Sulfur Dioxide - 100	0 - 100 ppm	25 - 100 ppm	1 ppm	< 10 Sec	< 30 Sec	< +/- 15%	<1% FS / Month	-30°C (-22°F)	50°C (122°F)	Echem	2 Years	1 Year	Div/Zone 2
Sulfur Dioxide - 25	0 - 25 ppm	5 - 25 ppm	0.1 ppm	< 3 Sec	< 6 Sec	< +/- 1%	<1% FS / Month	-40°C (-40°F)	60°C (140°F)	XCell	5 Years	3 Years	Div/Zone 2

## XCELL CATALYTIC BEAD SENSORS

Gas	Default Range	Selectable Full Scale Range	Resolution	Response Time*		Repeatability	Zero Drift	Operating Temperature		Sensor Type	Sensor Life	Warranty	Classification
				T50	T90			Min	Max				
Methane (5.0 %)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Propane (2.1 %)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Heptane (1.05 %)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Nonane (0.8 %)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Hydrogen (4.0 %)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Methane (4.4 % EN)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Propane (1.7 % EN)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Heptane (0.85 % EN)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1
Nonane (0.7 % EN)	0 - 100% LEL	20 - 100% LEL	1%	< 10 Sec	< 22 Sec	< +/- 1% LEL	<5% LEL / Year	-55°C (-67°F)	60°C (140°F)	XCell Cat Bead	5 Years	3 Years	Div/Zone 1

\*At ambient conditions

# General Monitors S5000 Gas Monitor Sensor Specifications



## INFRARED SENSORS

Gas	Default Range	Selectable Full Scale Range	Resolution	Response Time*		Repeatability	Zero Drift	Operating Temperature		Sensor Type	Sensor Life	Warranty	Classification
				T50	T90			Min	Max				
IR400 0-100 % LEL Propane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Hexane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Pentane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100 % LEL Ethylene	0 - 100% LEL	N/A	1% LEL	< 2 Sec	< 4 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	60°C (140°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Butane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Ethane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% by Volume Methane	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100 % LEL Methane EN	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-60°C (-76°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100 % LEL Propane EN	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-60°C (-76°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Hexane EN	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-60°C (-76°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100 % LEL Ethylene EN	0 - 100% LEL	N/A	1% LEL	< 2 Sec	< 4 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-40°C (-40°F)	60°C (140°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Butane EN	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-60°C (-76°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1
IR400 0-100% LEL Ethane EN	0 - 100% LEL	N/A	1% LEL	< 1.5 Sec	< 3 Sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	N/A	-60°C (-76°F)	75°C (167°F)	IR400	5+ Years	2 Years	Div/Zone 1

## PASSIVE SENSORS

Gas	Default Range	Selectable Full Scale Range	Resolution	Response Time*		Repeatability	Zero Drift	Operating Temperature		Sensor Type	Sensor Life	Warranty	Classification
				T50	T90			Min	Max				
10058-1	0 - 100% LEL	N/A	1% LEL	< 10 sec	< 30 sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	<5% FS / Year	-40°C (-40°F)	75°C (167°F)	Cat Bead Screened	3-5 Years	2 Years	Div/Zone 1
11159-8	0-20% LEL	N/A	1% LEL	< 10 sec	< 30 sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	<5% FS / Year	-40°C (-40°F)	70°C (158°F)	Cat Bead Sintered	3-5 Years	2 Years	Div/Zone 1
11159-1	0 - 100% LEL	N/A	1% LEL	< 10 sec	< 30 sec	+3% LEL @ <50% LEL; +5% LEL @ >50% LEL	<5% FS / Year	-40°C (-40°F)	70°C (158°F)	Cat Bead Sintered	3-5 Years	2 Years	Div/Zone 1
50448-9	0-20 ppm	N/A	1 ppm	< 14 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	75°C (167°F)	MOS Screened	3-5 Years	2 Years	Div/Zone 1
50448-5	0-50 ppm	N/A	1 ppm	< 14 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	75°C (167°F)	MOS Screened	3-5 Years	2 Years	Div/Zone 1
50448-1	0-100 ppm	N/A	1 ppm	< 14 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	75°C (167°F)	MOS Screened	3-5 Years	2 Years	Div/Zone 1
51457-9	0-20 ppm	N/A	1 ppm	< 30 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	70°C (158°F)	MOS Sintered	3-5 Years	2 Years	Div/Zone 1
51457-5	0-50 ppm	N/A	1 ppm	< 30 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	70°C (158°F)	MOS Sintered	3-5 Years	2 Years	Div/Zone 1
51457-1	0-100 ppm	N/A	1 ppm	< 30 sec	n/a	+ 2 ppm or 10% of applied gas	N/A	-40°C (-40°F)	70°C (158°F)	MOS Sintered	3-5 Years	2 Years	Div/Zone 1

\*At ambient conditions

# General Monitors<sup>®</sup> S5000 Gas Monitor

## Specifications



Product Specifications	
<b>COMBUSTIBLE GAS SENSOR TYPE</b>	Catalytic bead (Passive comb., XCell comb.) Infrared (IR400)
<b>TOXIC GAS &amp; OXYGEN SENSOR TYPE</b>	<p><b>XCell Toxic</b> Ammonia (NH<sub>3</sub>), Carbon Monoxide (CO), Carbon Monoxide (CO) H<sub>2</sub>-resistant, Chlorine (Cl<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), Chlorine Dioxide (ClO<sub>2</sub>)</p> <p><b>Passive MOS, Echem,</b></p> <p><b>XCell Toxic</b> Hydrogen Sulfide (H<sub>2</sub>S)</p> <p><b>XCell O<sub>2</sub></b> Oxygen (O<sub>2</sub>)</p> <p><b>Electrochem</b> Ammonia (NH<sub>3</sub>), Ethylene Oxide (ETO), Hydrogen (H<sub>2</sub>), Hydrogen Chloride (HCl), Hydrogen Cyanide (HCN), Hydrogen Fluoride (HF), Nitric Oxide (NO), Nitrogen Dioxide (NO<sub>2</sub>)</p>
<b>SENSOR MEASURING RANGES</b>	<p><b>Combustible</b> 0-100% LEL (CB, IR)</p> <p><b>Cl<sub>2</sub></b> 0-5, 0-10, 0-20 ppm</p> <p><b>ClO<sub>2</sub></b> 0-3 ppm</p> <p><b>CO</b> 0-100, 0-500, 0-1000 ppm</p> <p><b>CO, H<sub>2</sub>-resistant</b> 0-100 ppm</p> <p><b>ETO</b> 0-10 ppm</p> <p><b>H<sub>2</sub></b> 0-1000 ppm</p> <p><b>HCl</b> 0-50 ppm</p> <p><b>HCN</b> 0-50 ppm</p> <p><b>HF</b> 0-10 ppm</p> <p><b>H<sub>2</sub>S</b> 0-10, 0-20, 0-50, 0-100, 0-500 ppm</p> <p><b>NH<sub>3</sub></b> 0-100 ppm, 0-1000 ppm</p> <p><b>NO</b> 0-100 ppm</p> <p><b>NO<sub>2</sub></b> 0-10 ppm</p> <p><b>O<sub>2</sub></b> 0-25%</p> <p><b>SO<sub>2</sub></b> 0-25, 0-100 ppm</p>
<b>CLASSIFICATIONS DIVISIONS (US/CAN)</b>	See manual for complete CSA listings. Class I, Div/Zone 1&2, Groups A, B, C & D T5/T4; Class II, Div/Zone 1&2, Groups E, F & G, T6; Class III
<b>US ZONES</b>	Type 4X, IP66 Class I, Zone 1 AEx db IIC T5 Gb Class I, Zone 2 AEx nA nC IIC T4 Gc
<b>CANADIAN ZONES/ ATEX/ IECEx</b>	Zone 21 AEx tb IIIC T85°C Db Ex db IIC T5 Gb Ex nA nC IIC T4 Gc Ex tb IIIC T85°C Db
<b>WARRANTY</b>	<p><b>S5000 transmitter</b> 2 years</p> <p><b>XCell Sensors</b> 3 years</p> <p><b>Passive comb., MOS, IR400</b> 2 years</p> <p><b>Echem Sensors</b> Varies by gas</p>
<b>APPROVALS</b>	CSA, FM**, ATEX, IECEx, INMETRO, ABS, DNV-GL Marine, CE Marking. Complies with C22.2 No. 152, FM 6320, ANSI/ISA/CSA/IEC/EN 60079-29-1, ANSI/ISA 12.13.01. Suitable for SIL 2.

\*\* See manual for FM-approved sensors

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

Dimensions																																		
<b>HOUSING (W x H x D)</b>	6.37" x 5.38" x 4.25" (162 x 137 x 108 mm)																																	
W/PASSIVE SENSOR	6.37" x 7.62" x 4.25" (162 x 193 x 108 mm)																																	
W/DIGITAL SENSOR	6.37" x 10.4" x 4.25" (162 x 265 x 108 mm)																																	
W/IR400 IR SENSOR	14.8" x 6.0" x 4.25" (375 x 152 x 108 mm)																																	
<b>WEIGHT</b>	8 lb. (3.6 kg), 316 SS																																	
Environmental Specifications																																		
<b>OPERATING TEMPERATURE RANGE</b>	<p><b>Transmitter</b> -55°C to +75°C</p> <p><b>CB (sintered, Zones)</b> -40°C to +70°C</p> <p><b>CB (screened, Div)</b> -40°C to +75°C</p> <p><b>MOS (sintered, Zones)</b> -40°C to +70°C</p> <p><b>MOS (screened, Div)</b> -40°C to +75°C</p> <p><b>IR (CSA)</b> -40°C to +75°C</p> <p><b>IR (ATEX/IECEx)</b> -60°C to +75°C</p> <p><b>XCell (Comb)</b> -55°C to +60°C</p> <p><b>XCell (Toxic/O<sub>2</sub>)</b> -40°C to +60°C</p>																																	
<b>STORAGE TEMPERATURE RANGE</b>	<p><b>Housing, IR400, passive sensors</b> -50°C to +85°C</p> <p><b>XCell sensors</b> -40°C to +60°C</p>																																	
<b>RELATIVE HUMIDITY (NON-CONDENSING)</b>	<p><b>XCell sensors, IR400,</b> 10-95%</p> <p><b>Passive combustible</b> 0-95%</p> <p><b>Passive H<sub>2</sub>S</b> 15-95%</p>																																	
Mechanical Specifications																																		
<b>INPUT POWER</b>	24 VDC nominal, 12 to 30 VDC																																	
<b>SIGNAL OUTPUT</b>	Dual 4-20 mA current source or sink, HART, Modbus, Bluetooth. <i>Optional: w/o Bluetooth</i>																																	
<b>RELAY RATINGS</b>	5A @ 30VDC; 5A @220 VAC (3X) SPDT – fault, warn, alarm																																	
<b>RELAY MODES</b>	Common, discrete, horn																																	
<b>NORMAL MAX POWER</b>	<table border="1"> <thead> <tr> <th></th> <th>Without Relays</th> <th>With Relays</th> </tr> </thead> <tbody> <tr> <td><b>Passive comb.</b></td> <td>5.0 W</td> <td>6.0 W</td> </tr> <tr> <td><b>Passive MOS</b></td> <td>9.8 W</td> <td>10.8 W</td> </tr> <tr> <td><b>IR400</b></td> <td>7.9 W</td> <td>8.9 W</td> </tr> <tr> <td><b>XCell comb.</b></td> <td>5.0 W</td> <td>6.0 W</td> </tr> <tr> <td><b>XCell toxic &amp; O<sub>2</sub></b></td> <td>2.6 W</td> <td>3.6 W</td> </tr> <tr> <td><b>IR400 + XCell comb.</b></td> <td>10.8 W</td> <td>11.8 W</td> </tr> <tr> <td><b>IR400 + XCell toxic or O<sub>2</sub></b></td> <td>8.6 W</td> <td>9.6 W</td> </tr> <tr> <td><b>Dual XCell toxic or O<sub>2</sub></b></td> <td>3.3 W</td> <td>4.3 W</td> </tr> <tr> <td><b>Dual XCell comb.</b></td> <td>7.4 W</td> <td>8.4 W</td> </tr> <tr> <td><b>XCell comb. + XCell toxic or O<sub>2</sub></b></td> <td>5.7 W</td> <td>6.7 W</td> </tr> </tbody> </table>		Without Relays	With Relays	<b>Passive comb.</b>	5.0 W	6.0 W	<b>Passive MOS</b>	9.8 W	10.8 W	<b>IR400</b>	7.9 W	8.9 W	<b>XCell comb.</b>	5.0 W	6.0 W	<b>XCell toxic &amp; O<sub>2</sub></b>	2.6 W	3.6 W	<b>IR400 + XCell comb.</b>	10.8 W	11.8 W	<b>IR400 + XCell toxic or O<sub>2</sub></b>	8.6 W	9.6 W	<b>Dual XCell toxic or O<sub>2</sub></b>	3.3 W	4.3 W	<b>Dual XCell comb.</b>	7.4 W	8.4 W	<b>XCell comb. + XCell toxic or O<sub>2</sub></b>	5.7 W	6.7 W
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<b>STATUS INDICATORS</b>	4-digit scrolling LED, icons depicting fault, warn, alarm, Bluetooth, 1 and 2 to indicate sensor reading displayed																																	
<b>RS-485 OUTPUT</b>	Modbus RTU, suitable for linking up to 128 units or up to 247 units with repeaters																																	
<b>BAUD RATE</b>	2400, 4800, 9600, 19200, 38400, 115200																																	
<b>HART</b>	HART 7, Device Description (DD) and Device Type Manager (DTM) available																																	
<b>FAULTS MONITORED</b>	Low supply voltage, RAM checksum error, flash checksum error, EEPROM error, internal circuit error, relay, invalid sensor configuration, sensor faults, calibration faults, analog output mismatch fault																																	
<b>CABLE REQUIREMENTS</b>	3-wire shielded cable for single sensor and 4-wire shielded cable for dual sensor configurations. Accommodates up to 12 AWG or 4 mm <sup>2</sup> <i>Refer to manual for mounting distances.</i>																																	

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