

# S5000 Gas Monitor

Extreme Durability. Anytime. Anywhere.



General Monitors



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

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

Bluetooth® 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.

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

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

 X/S Connect App

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



## Advanced Sensor Technology

POWERED BY



WITH



- 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®



WE KNOW WHAT'S AT STAKE.

# 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 - H2 Resistant	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
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
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

# 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
IR700 0-2000 ppm Carbon Dioxide	0-2000 ppm	N/A	20 ppm	< 4 Sec	< 9 Sec	+5% FS @ <50% FS; +10% FS @ >50% FS	N/A	-40 C (-40 F)	50 C (122 F)	IR700	5+ Years	2 Years	Div/Zone 1
IR700 0-5000 ppm Carbon Dioxide	0-5000 ppm	N/A	50 ppm	< 4 Sec	< 9 Sec	+5% FS @ <50% FS; +10% FS @ >50% FS	N/A	-40 C (-40 F)	50 C (122 F)	IR700	5+ Years	2 Years	Div/Zone 1
IR700 0-10000 ppm Carbon Dioxide	0-10000 ppm	N/A	100 ppm	< 4 Sec	< 9 Sec	+5% FS @ <50% FS; +10% FS @ >50% FS	N/A	-40 C (-40 F)	50 C (122 F)	IR700	5+ Years	2 Years	Div/Zone 1
IR700 0-30000 ppm Carbon Dioxide	0-30000 ppm	N/A	300 ppm	< 4 Sec	< 9 Sec	+5% FS @ <50% FS; +10% FS @ >50% FS	N/A	-40 C (-40 F)	50 C (122 F)	IR700	5+ Years	2 Years	Div/Zone 1
IR700 0-50000 ppm Carbon Dioxide	0-50000 ppm	N/A	500 ppm	< 4 Sec	< 9 Sec	+5% FS @ <50% FS; +10% FS @ >50% FS	N/A	-40 C (-40 F)	50 C (122 F)	IR700	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

# 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>)</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>Infrared</b> Carbon Dioxide (CO<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>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>CO<sub>2</sub></b> 0-2000, 0-5000, 0-10000, 0-30000, 0-50000 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, IR700</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.
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, IR700, 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, IR700</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/IR700</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/IR700 + XCell comb.</b></td> <td>10.8 W</td> <td>11.8 W</td> </tr> <tr> <td><b>IR400/IR700 + 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/IR700</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/IR700 + XCell comb.</b>	10.8 W	11.8 W	<b>IR400/IR700 + 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> . Refer to manual for mounting distances.																																		

\*\* See manual for FM-approved sensors

Specifications subject to change without notice.

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