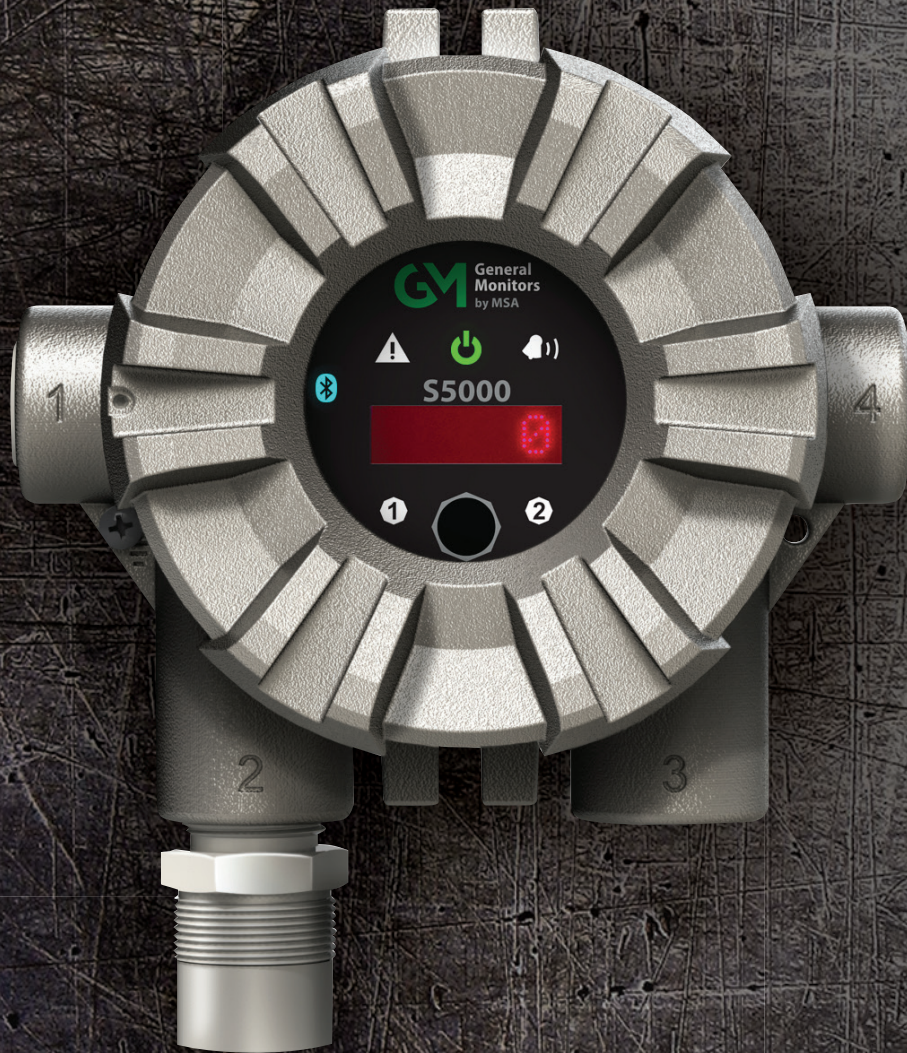




General Monitors

S5000 Gas Monitor



*A DETECTOR AS TOUGH
AS YOU ARE...*



*"LOWER TEMPERATURE SPEC?...
ARCTIC WINTERS"*

*"IT HAS TO BE THE MOST RELIABLE PIECE
OF EQUIPMENT OUT HERE"*

*"IF THE DETECTOR DOESN'T WORK,
WE DON'T, SO IT NEEDS TO WORK"*

*"I DON'T HAVE TIME TO BABYSIT
A GAS DETECTOR"*



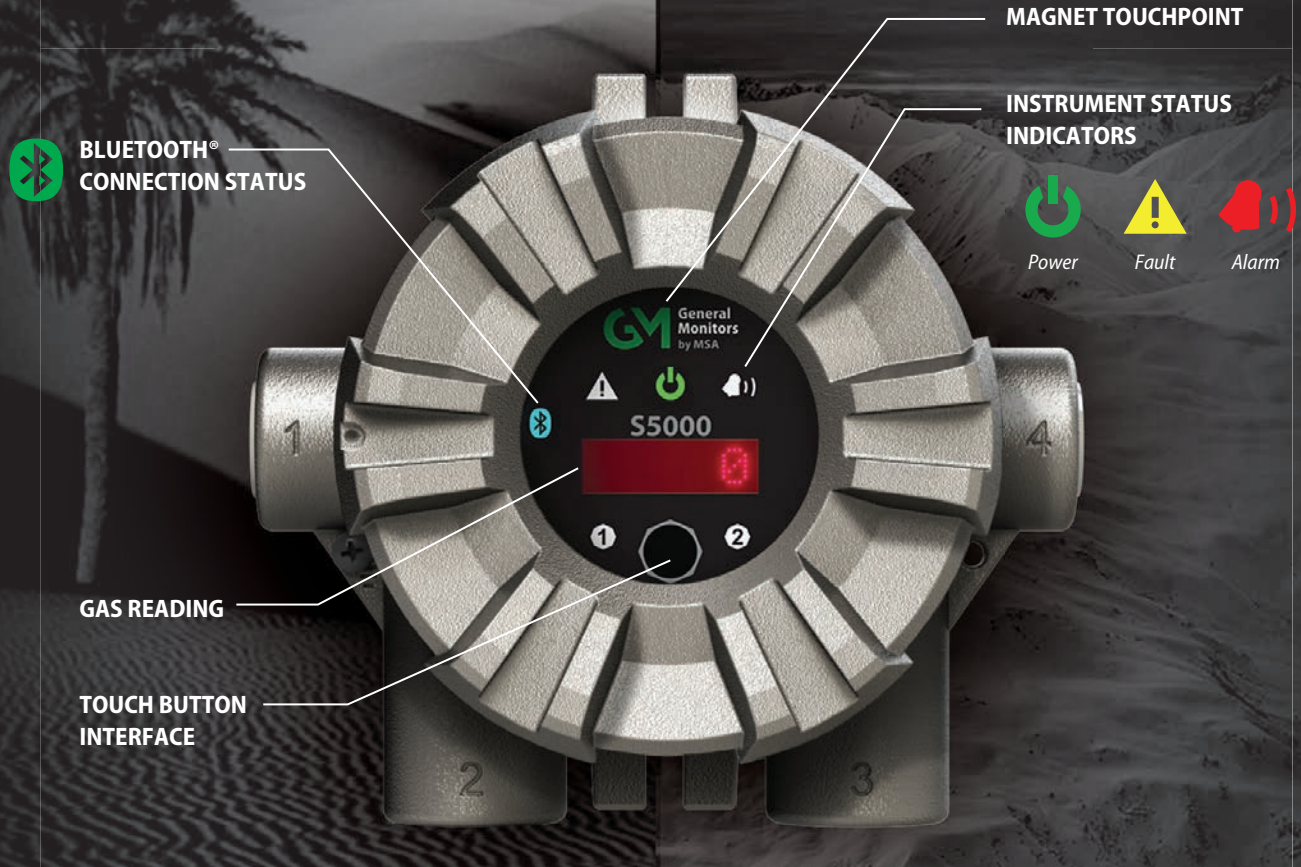
*IS THE ONLY DETECTOR
YOU'LL NEED*

*"I WANT TO INSTALL IT
AND FORGET ABOUT IT"*



EXTREME DURABILITY

ANYTIME. ANYWHERE.



STAY CONNECTED. WORK SMARTER.

- Bluetooth wireless technology
- Check status and get alerts up to 75 ft. (23 m) away
- Modify settings/setpoints/alarms
- Initiate calibration and view progress
- Reduce setup time by at least 50%

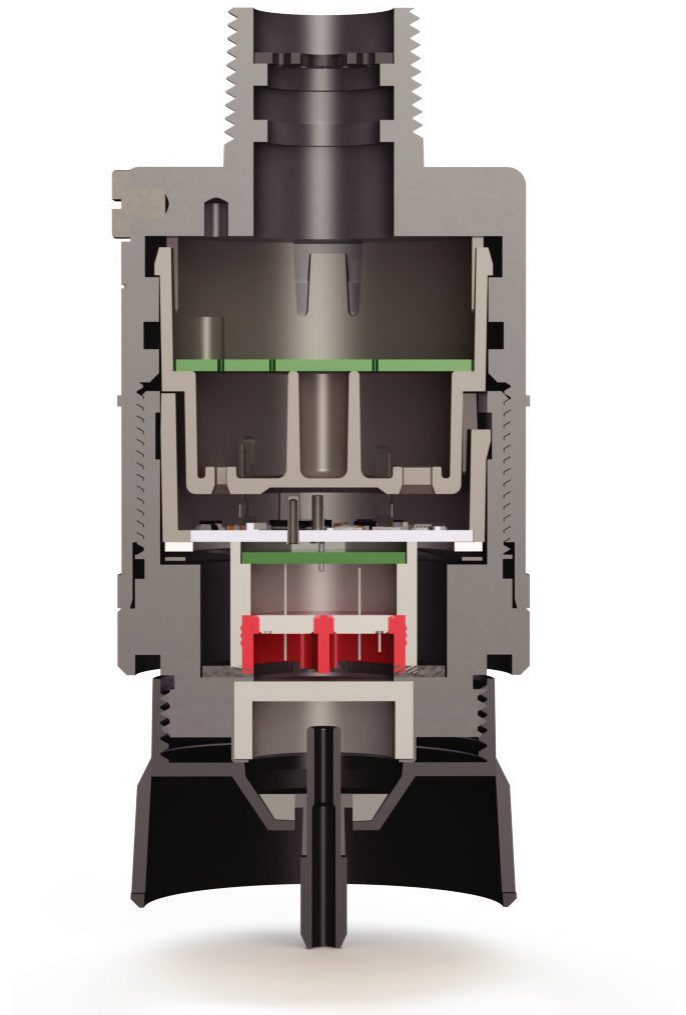
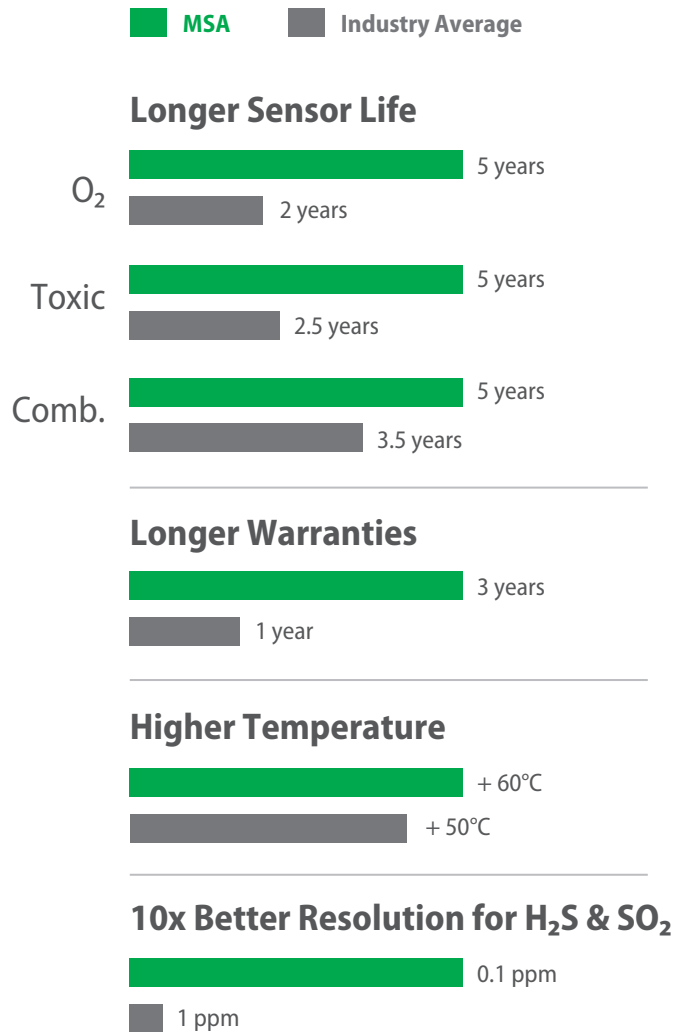


ADVANCING SENSOR TECHNOLOGY

Up to **1.5 YEARS** between calibrations!

XCell[®]

S E N S O R S



**Data may vary for different gases and configurations*

RE-CALIBRATE YOUR EXPECTATIONS



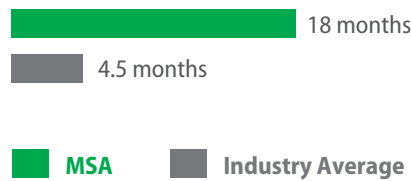
Adaptive Environmental Compensation (AEC)

Longer Sensor Life

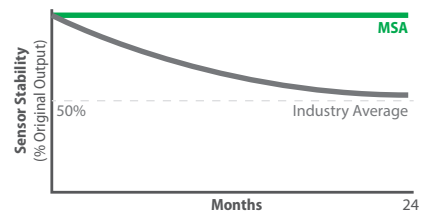


Automatically self-checks 4x/day

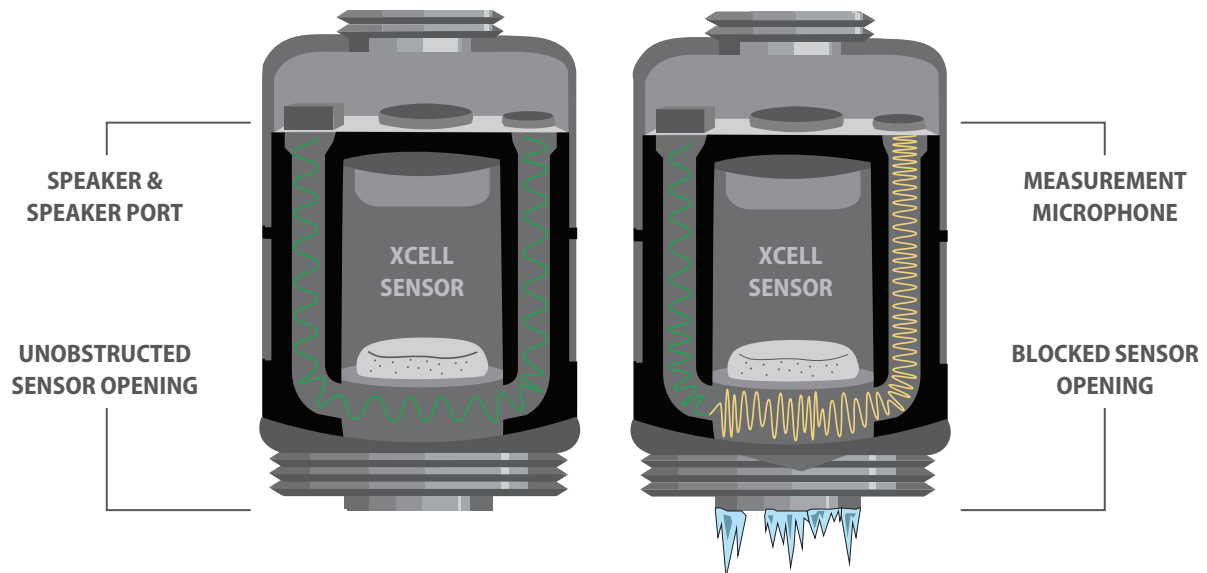
Longer Calibration Cycles



Better Stability (Lower Drift)



Diffusion Supervision (DS)

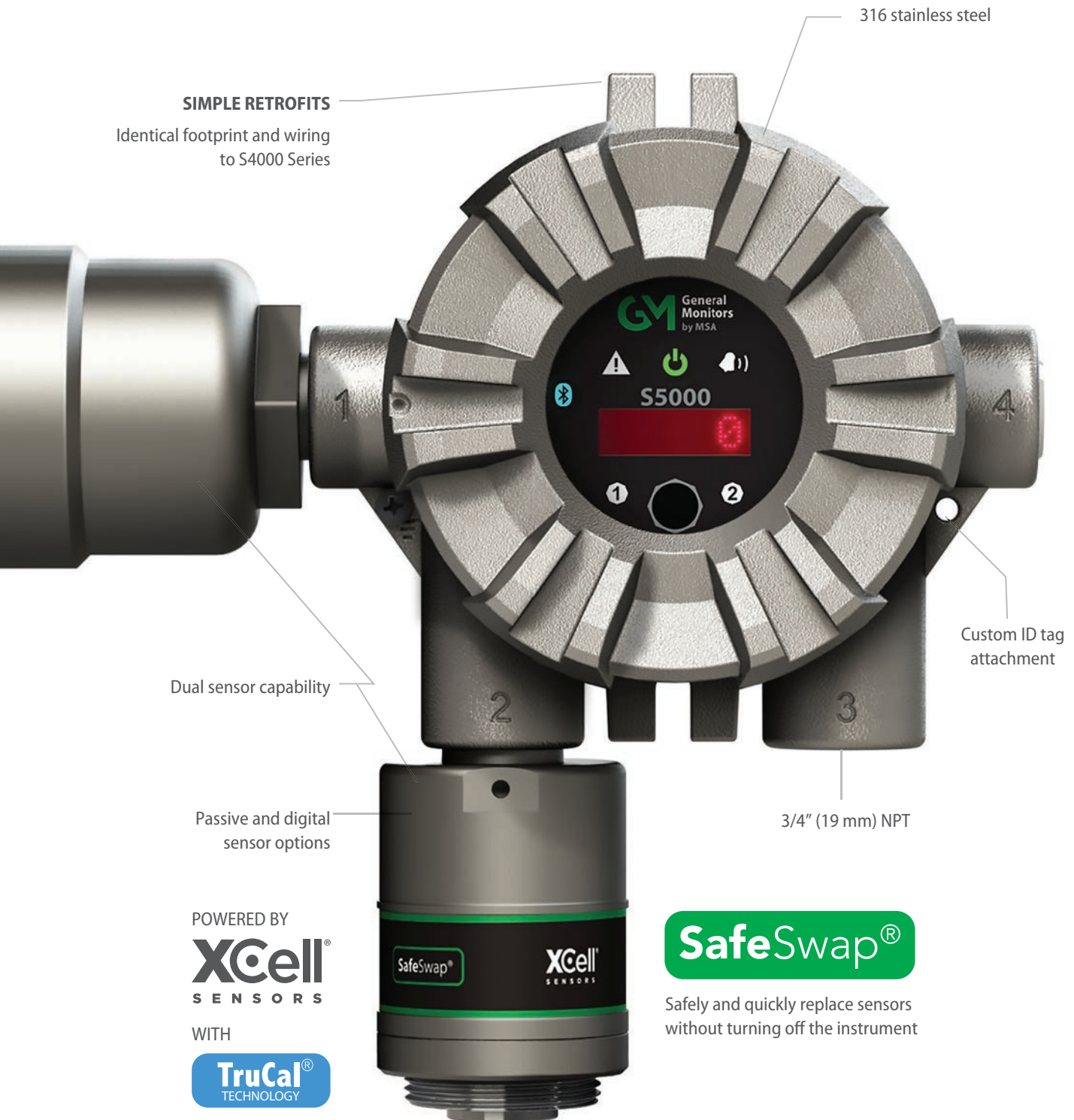


Diffusion Supervision warns if the sensor inlet becomes blocked and unable to detect gas. It employs a proprietary acoustic mechanical design and algorithms to measure sound across the sensor's inlet. If the inlet is blocked with a material, like ice, the difference in the sound is detected and the unit is put into fault. When the obstruction is removed, Diffusion Supervision detects the clearance and returns to normal operation.

**TruCal available on CO & H₂S SCell Sensors*

STANDS OUT BUT STILL FITS IN

It just works. All day. Every day.



IT MAKES SENSE... NO EXCEPTIONS



EXPECTED LIFE



WARRANTY



PATENTS

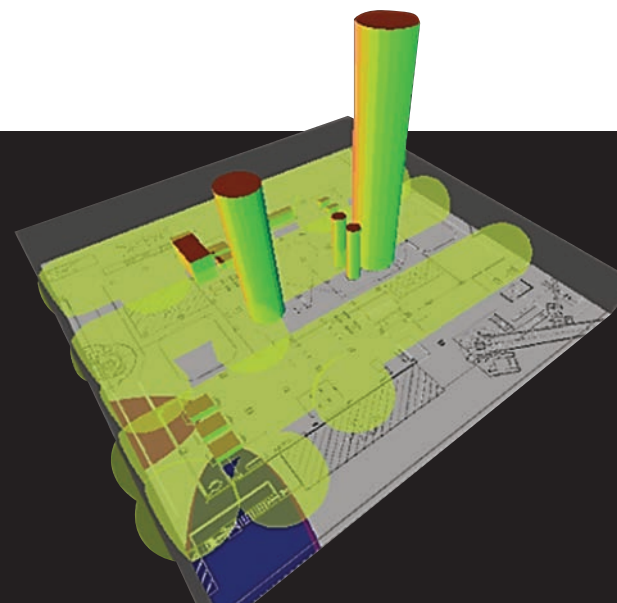
We're going to help you save*

Installation	30%	~\$7,000
Annual maintenance	50%	~\$1,500
Over the life of the product	75%	~\$15k

Questions about sensor placement?

MSA's gas and flame mapping service combines 150 years of gas detection experience with 3D technology to help you maximize the effectiveness of every sensor.

Check out the link or scan for more information:
MSAsafety.com/gas-mapping



*Based on 10 sensors and 2 sensors/transmitter

Specifications

Product Specifications	
COMBUSTIBLE GAS SENSOR TYPE	Catalytic Bead (passive comb., XCell comb.) Infrared (IR400)
TOXIC GAS & OXYGEN SENSOR TYPE	XCell Toxic Ammonia (NH ₃), Carbon Monoxide (CO), Carbon Monoxide (CO) H ₂ -resist., Chlorine (Cl ₂), Sulfur Dioxide (SO ₂) XCell Toxic, Echem, Passive MOS Hydrogen Sulfide (H ₂ S) XCell O₂ Oxygen (O ₂) Infrared Carbon Dioxide (CO ₂) Echem Ammonia (NH ₃), Hydrogen (H ₂), Nitrogen Dioxide (NO ₂)
SENSOR MEASURING RANGES	Combustible 0-100% LEL (CB, IR) XCell Cl₂ 0-5, 0-10, 0-20 ppm XCell CO 0-100, 0-500, 0-1000 ppm CO, H₂-resistant 0-100 ppm CO₂ 0-2000, 0-5000, 0-10000, 0-30000, 0-50000 ppm H₂ Echem 0-1000 ppm XCell NH₃ 0-100 ppm H₂S MOS 0-20, 0-50, 0-100 ppm XCell H₂S 0-10, 0-20, 0-50, 0-100 ppm H₂S Echem 0-500 ppm NH₃ Echem 0-1000 ppm NO₂ Echem 0-10 ppm XCell O₂ 0-25% XCell SO₂ 0-25 ppm
APPROVALS CLASSIFICATION	See manual for complete CSA listings.
DIVISIONS (US/CAN)	Class I, Div 1&2, Groups A, B, C & D T5/T4; Class II, Div 1&2, Groups E, F & G, T6; Class III Type 4X, IP66
US ZONES	Class I, Zone 1 AEx db IIC T5 Gb Class I, Zone 2 AEx nA nC IIC T4 Gc Zone 21 AEx tb IIIC T85°C Db
CANADIAN ZONES/ATEX/IECEx	Ex db IIC T5 Gb Ex nA nC IIC T4 Gc Ex tb IIIC T85°C Db
CE MARKING DIRECTIVES	Complies with EMC, RED, ATEX
WARRANTY	S5000 transmitter 2 years XCell Sensors 3 years Passive comb., MOS, IR400/IR700 2 years Echem sensors Varies by gas
APPROVALS	CSA, 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	
HOUSING (W x H)	6.37" x 5.38" (162 x 137 mm)
W/PASSIVE SENSOR	6.37" x 7.62" (162 x 193 mm)
W/DIGITAL SENSOR	6.37" x 10.4" (162 x 265 mm)
LID (DEPTH)	4.25" (108 mm)
WEIGHT	8.0 lb. (3.6 kg), 316 SS

Environmental Specifications		
OPERATING TEMPERATURE RANGE	Transmitter	-55°C to +75°C
	CB (sintered, Zones)	-40°C to +70°C
	CB (screened, Div)	-40°C to +75°C
	MOS (sintered, Zones)	-40°C to +70°C
	MOS (screened, Div)	-40°C to +75°C
	IR (CSA)	-40°C to +75°C
	IR (ATEX/IECEx)	-60°C to +75°C
STORAGE TEMPERATURE RANGE	XCell (Comb)	-55°C to +60°C
	XCell (Toxic/O₂)	-40°C to +60°C
	Housing, IR400, IR700, passive sensors	-50°C to +85°C
OPERATING HUMIDITY RANGE	XCell sensors, IR400, IR700	10-95%
	Passive comb.	10-90%
	Passive H₂S	0-95%
Mechanical Specifications		
INPUT POWER	24 VDC nominal, 12 to 30 VDC	
SIGNAL OUTPUT	Dual 4-20 mA current source or sink, HART, Modbus, Bluetooth. <i>Optional: w/o Bluetooth</i>	
RELAY RATINGS	5 A @ 30 VDC; 5 A @ 220 VAC (3X) SPDT - fault, warn, alarm	
RELAY MODES	Common, discrete, horn	
NORMAL MAX POWER RELAYS	Passive comb.	6.0 W
	Passive MOS	10.8 W
	IR400/IR700	8.9 W
	XCell comb.	6.0 W
	XCell toxic & O₂	3.6 W
	IR400/IR700 + XCell comb.	11.8 W
	IR400/IR700 + XCell toxic or O₂	9.6 W
STATUS INDICATORS	Dual XCell toxic or O₂	4.3 W
	Dual XCell comb.	8.4 W
	XCell comb. + XCell toxic or O₂	6.7 W
RS-485 OUTPUT	4-digit scrolling LED, icons depicting fault, warn, alarm, Bluetooth, 1 and 2 to indicate sensor reading displayed	
BAUD RATE	Modbus RTU, suitable for linking up to 128 units or up to 247 units with repeaters	
HART	2400, 4800, 9600, 19200, 38400, 115200	
FAULTS MONITORED	HART 7, HART device description language available	
CABLE REQUIREMENTS	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	
	3-wire shielded cable for single sensor and 4-wire shielded cable for dual sensor configurations. Accommodates up to 12 AWG. Refer to manual for mounting distances.	

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 operates in over 40 countries worldwide. To find an MSA office near you, please visit [MSAsafety.com/offices](https://www.MSA.com/offices).