

ULTIMA® X5000 Gas Monitor

The future looks bright.



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

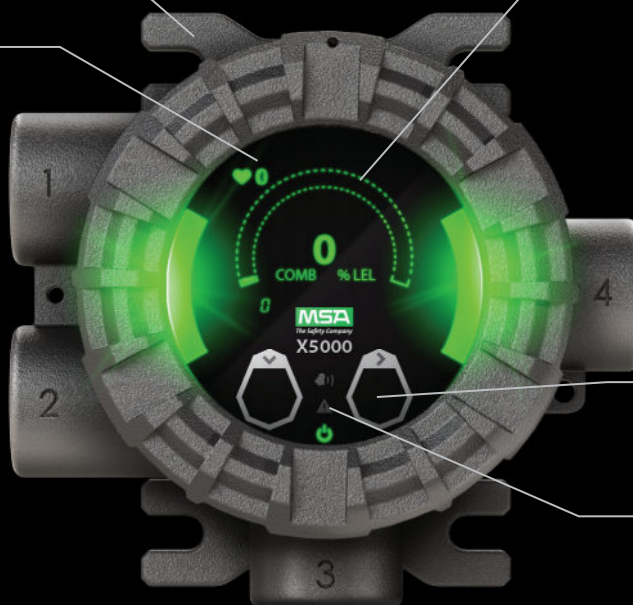
Bluetooth® wireless technology allows mobile device to act as HMI screen and controller.

Intuitive display features new design equipped with organic LED (OLED) display, with full word text in 9 languages. Bright green, yellow, and red status LEDs for extreme visibility.



X/S Connect App

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



Industry-first, touch-button interface provides intuitive, tool-free user experience.

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

Advanced Sensor Technology

POWERED BY

XCell®
SENSORS

WITH

TruCal®
TECHNOLOGY

- Patented XCell Sensors with TruCal technology* extend calibration cycles for as long as 18 months, 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.
- **Dual sensor capability** doubles sensing power with half the footprint of a single gas sensor transmitter.
- **SafeSwap** enables safe and quick XCell Sensor replacement without powering off gas detector.

SafeSwap®



Applications

- | | | |
|---------------|-----------------|--------------------|
| • Chemical | • Petrochemical | • Wastewater |
| • Oil and gas | • Utilities | • General industry |

* Only CO & H₂S XCell Sensors

WE KNOW WHAT'S AT STAKE.

ULTIMA X5000 Gas Monitor

Specifications



Product Specifications			
COMBUSTIBLE GAS SENSOR TYPE	Catalytic Bead (XCell combustible) Infrared (XIR Plus)		
TOXIC GAS & OXYGEN SENSOR TYPE	XIR PLUS	Carbon Dioxide (CO ₂)	
	XCell Toxic	Carbon Monoxide (CO), Carbon Monoxide (CO) H ₂ -resistant, Hydrogen Sulfide (H ₂ S), Chlorine (Cl ₂), Ammonia (NH ₃), Sulfur Dioxide (SO ₂)	
	XCell O ₂	Oxygen (O ₂)	
	Electrochem.	Hydrogen (H ₂), Ammonia (NH ₃), Nitrogen Dioxide (NO ₂)	
SENSOR MEASURING RANGES	Combustible	0-100% LEL	
	CO ₂	0-2%, 0-5% Vol	
	CO	0-100, 0-500, 0-1000 ppm	
	CO, H ₂ -resistant	0-100 ppm	
	Cl ₂	0-5, 0-10, 0-20 ppm	
	H ₂	0-1000 ppm	
	H ₂ S	0-10, 0-50, 0-100, 0-500 ppm	
	NH ₃	0-100 ppm, 0-1000 ppm	
	NO ₂	0-10 ppm	
	O ₂	0-25%	
	SO ₂	0-25 ppm	
TYPICAL SENSOR LIFE	XCell Sensors	5 years	
	Infrared	10 years	
SENSOR PERFORMANCE*	T90 (typical)	Repeatability	Zero Drift (per year)
	XIR PLUS COMB.	< ± 1% LEL	N/A
	XIR PLUS CO ₂	< ± 1% Vol	N/A
	XCELL COMB.	< ± 3% LEL	< 5% LEL
	XCELL CO	< ± 1%	< 1% full scale
	XCELL Cl ₂	± 1%	≤ 1% FS per mo.
	H ₂	< ± 10%	< 1% FS per mo.
	XCELL H ₂ S	< ± 1%	< 1% full scale
	XCELL NH ₃	± 1%	≤ 1% FS per mo.
	NO ₂	< ± 10%	< 1% FS per mo.
	XCELL O ₂	< ± 1% Vol	< 0.2% Vol
	XCELL SO ₂	± 1%	≤ 1% FS per mo.
APPROVALS CLASSIFICATION	Markings vary by component. See manual for specific component markings.		
DIVISIONS (US/CAN)	Class I, II, III; Div 1 & 2, T4/T5/T6		
ZONES (GLOBAL)	Ex db nA IIC T5 Gb (Class I, Zone 1/Zone2) Ex tb IIIC T85°C Db (Class II, Zone 21)		
ENCLOSURE RATING	Type 4X, IP66		
WARRANTY	X5000 transmitter	2 years	
	XIR PLUS	10 years source, 5 years electronics	
	XCell Sensors	3 years	
	Electrochemical Sensors	Varies by gas	
APPROVALS	CSA, ATEX, IECEx, INMETRO, DNV-GL Marine, CE Marking. Complies with C22.2 No. 152, FM 6320 RED, FCC, Suitable for SIL 2		

*Typical response at standard temperature and pressure test conditions

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.

Environmental Specifications**	
OPERATING TEMPERATURE RANGE	** May differ by gas type, see manual
	XCell -40°C to +60°C
	XIR PLUS -40°C to +60°C
STORAGE TEMPERATURE RANGE	-40°C to +60°C
RELATIVE HUMIDITY (NON-CONDENSING)	XCell toxics & O ₂ 10-95%
	XCell combustible 0-95%
	XIR PLUS 15-95%
Mechanical Specifications	
INPUT POWER	11 to 30 VDC, 3 wire, <5 W nominal
SIGNAL OUTPUT	Dual 4-20 mA current source, HART
BLUETOOTH (OPTIONAL)	Bluetooth Low Energy (BLE) v4.3 or higher
RELAY RATINGS	5 A @ 30 VDC; 5 A @ 220 VAC (3X) SPDT - fault, warn, alarm
RELAY MODES	Common, discrete, horn
NORMAL MAX POWER RELAYS	XIR PLUS 6.7 W
	XCell combustible 4.9 W
	XCell Toxic & O ₂ 2.8 W
	XIR PLUS & XCell combustible 10.9 W
	XIR PLUS & XCell toxic or O ₂ 7.0 W
	Dual XIR PLUS 11.6 W
	Dual XCell toxic & O ₂ 3.6 W
	Dual XCell combustible 10.6 W
	Dual XCell comb. & XCell toxic or O ₂ 5.3 W
EMC DIRECTIVE	Complies with EN 50270, EN 61000-6-4, EN 61000-6-3
DISPLAY	Organic LED (multi-lingual) with contrast ratio of 2000:1 and view angel of 160°
HART	HART 7, HART device description language available
FAULTS MONITORED	Low supply voltage, RAM checksum error, flash checksum error, EEPROM error, internal circuit error, relay, invalid sensor configuration, sensor faults, general system
WIRING REQUIREMENTS	3-wire (single sensor) or 4-wire (dual sensor) shielded cable. <i>Refer to manual for mounting distances and wire gauge.</i>
Dimensions	
HOUSING (W x H)	5.88" x 5.71" (150 x 145 mm)
W/XCELL SENSOR	5.88" x 10.15" (150 x 258 mm)
W/XCELL & XIR SENSORS	13.42" x 10.15" (341 x 258 mm)
LID (DEPTH)	
	W/RELAY BOARD 4.86" (123 mm)
	W/O RELAY BOARD 3.86" (98 mm)
WEIGHT	8.8 lb. (4 kg), 316 SS

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