

# ULTIMA® X5000 Gas Monitor



The future looks bright.

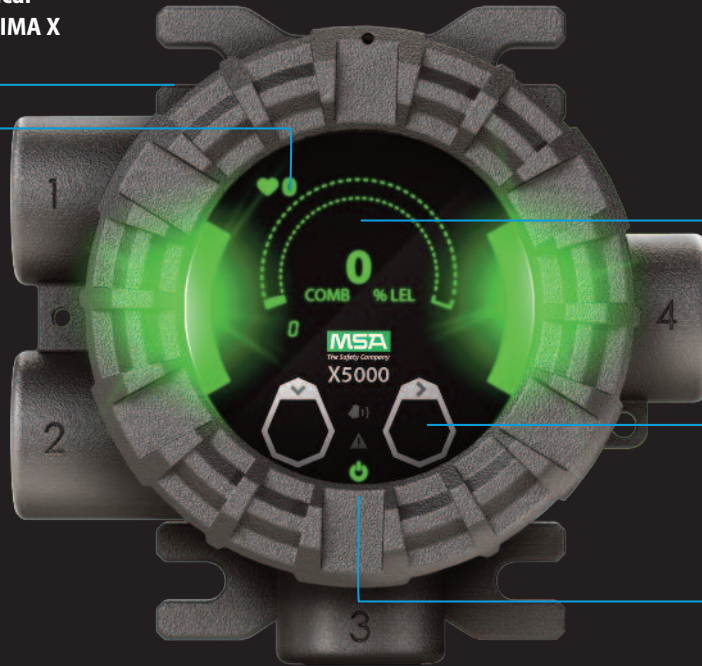
Simple retrofits have identical footprint and wiring to ULTIMA X Gas Monitor series.

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



Download the X/S Connect App from the Google Play store.

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



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.

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**

- 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.\*
- 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.
- **Dual sensor capability** doubles sensing power with half the footprint of a single gas sensor transmitter.



\*Only CO & H<sub>2</sub>S XCell Sensors

## Applications

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

# ULTIMA® X5000 Gas Monitor



| PRODUCT SPECIFICATIONS                    |  |                      |                              |
|---|--|----------------------|------------------------------|
| <b>COMBUSTIBLE GAS SENSOR TYPE</b>        | Catalytic Bead (XCell Comb)<br>Infrared (XIR PLUS)   |                      |                              |
| <b>TOXIC GAS &amp; OXYGEN SENSOR TYPE</b> | Hydrogen Sulfide H <sub>2</sub> S (XCell Toxic)<br>Carbon Monoxide CO (XCell Toxic)<br>Carbon Monoxide CO H <sub>2</sub> -Resistant (XCell Toxic)<br>Oxygen O <sub>2</sub> (XCell O <sub>2</sub> )   |                      |                              |
| <b>SENSOR MEASURING RANGES</b>            | Combustible: 0-100% LEL<br>H <sub>2</sub> S: 0-10, 0-50, 0-100 ppm<br>CO: 0-100, 0-500, 0-1000 ppm<br>CO-H <sub>2</sub> Resist: 0-100 ppm<br>O <sub>2</sub> : 0-25%  |                      |                              |
| <b>TYPICAL SENSOR LIFE</b>                | 5 years – XCell Sensors<br>10 years - infrared   |                      |                              |
| <b>SENSOR PERFORMANCE*</b>                | <b>T90 (TYPICAL)</b>   | <b>REPEATABILITY</b> | <b>ZERO DRIFT (PER YEAR)</b> |
| XIR PLUS                                  | <2 sec.  | ≤ +/- 1% LEL         | <5% LEL                      |
| XCELL COMB                                | <22 sec.   | ≤ +/- 1% LEL         | <5% LEL                      |
| XCELL H <sub>2</sub> S                    | <23 sec.   | +/- 5%               | <1% full scale               |
| XCELL O <sub>2</sub>                      | <15 sec.   | ≤ +/- 0.3% Vol       | 0.2% Vol                     |
| XCELL CO                                  | <9 sec.  | +/- 5%               | <1% full scale               |
| <b>APPROVALS CLASSIFICATION</b>           | <b>US Divisions</b><br>Class I Div 1 Groups A-D, T5, Type 4X, IP66<br>Class II Div 1 Groups E-G, T6; Class III<br><b>US Zones</b><br>Class I Zone 1 AEx db IIC T5 Gb<br>Class II Zone 21 AEx tb IIIC T85°C Db<br><b>Global Zones</b><br>Ex db IIC T5 Gb<br>Ex tb IIIC T85°C Db |                      |                              |
| <b>WARRANTY</b>                           | X5000 Transmitter: 2 years<br>XIR PLUS: 10 years source, 5 years electronics<br>XCell Sensors: 3 years   |                      |                              |
| <b>APPROVALS</b>                          | CSA, ATEX, IECEx, CE Marking.<br>Complies with C22.2 No. 152, FM 6320,<br>IEC/EN: EN 60079-29-1, ANSI/ISA 12.13.01.<br>Suitable for SIL 2  |                      |                              |
| ENVIRONMENTAL SPECIFICATIONS              |  |                      |                              |
| <b>OPERATING TEMPERATURE RANGE</b>        | XCell: -40°C to +60°C<br>XIR PLUS: -40°C to +60°C<br>(may differ by gas, see manual)   |                      |                              |
| <b>STORAGE TEMPERATURE RANGE</b>          | -40°C to +60°C   |                      |                              |
| <b>RELATIVE HUMIDITY (NON-CONDENSING)</b> | 10-95% (XCell Toxics & O <sub>2</sub> )<br>0-95% (XCell Comb)<br>0-95% (XIR PLUS)  |                      |                              |

\*At ambient conditions

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products. Specifications subject to change without notice.



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| MECHANICAL SPECIFICATIONS            |  |
|--------------------------------------|--|
| <b>INPUT POWER</b>                   | 10 to 30 VDC, 3 wire, <5W nominal  |
| <b>SIGNAL OUTPUT</b>                 | Dual 4-20 mA current source, HART, Bluetooth<br>Optional: w/o Bluetooth  |
| <b>RELAY RATINGS</b>                 | 5A @ 30VDC; 5A @220 VAC<br>(3X) SPDT – fault, warn, alarm  |
| <b>RELAY MODES</b>                   | Common, discrete, horn   |
| <b>NOMINAL MAX POWER (W/ RELAYS)</b> | XIR PLUS 6.7W<br>XCell Comb 5.5W<br>XCell Toxic & O <sub>2</sub> 2.8W<br>XIR PLUS and XCell Comb 9.6W<br>XIR PLUS and XCell Toxic & O <sub>2</sub> 7.0W<br>Dual XIR PLUS 11.6W<br>Dual XCell Toxic & O <sub>2</sub> 3.6W<br>Dual XCell Comb 10.6W<br>Dual XCell Comb and XCell Toxic & O <sub>2</sub> 5.5W |
| <b>EMC DIRECTIVE</b>                 | Complies with EN 50270, EN 61000-6-4,<br>EN 61000-6-3  |
| <b>DISPLAY</b>                       | Organic LED (multi-lingual) with Contrast Ratio<br>of 2000:1 and View Angle of 160°  |
| <b>BAUD RATE</b>                     | 2400, 4800, 9600, 19200, 38400, 115200   |
| <b>HART</b>                          | HART 7, HART device description language<br>available  |
| <b>FAULTS MONITORED</b>              | Low supply voltage, RAM checksum error, flash<br>checksum error, EEPROM error, internal circuit<br>error, relay, invalid sensor configuration, sensor<br>faults, calibration faults, general system  |
| <b>WIRING REQUIREMENTS</b>           | 3-wire (single sensor) or 4-wire (dual sensor)<br>shielded cable.<br><i>Refer to manual for mounting distances and wire<br/>gauge.</i>   |

