ULTIMA® X5000

WE KNOW YOU'RE TIRED OF...

"NEEDING TO DISCONNECT POWER BEFORE CHANGING A SENSOR"

"REMEMBERING HOW TO CALIBRATE THIS THING"

"HAVING TO PULL SO MUCH WIRE AT EVERY GAS DETECTOR INSTALLATION..."
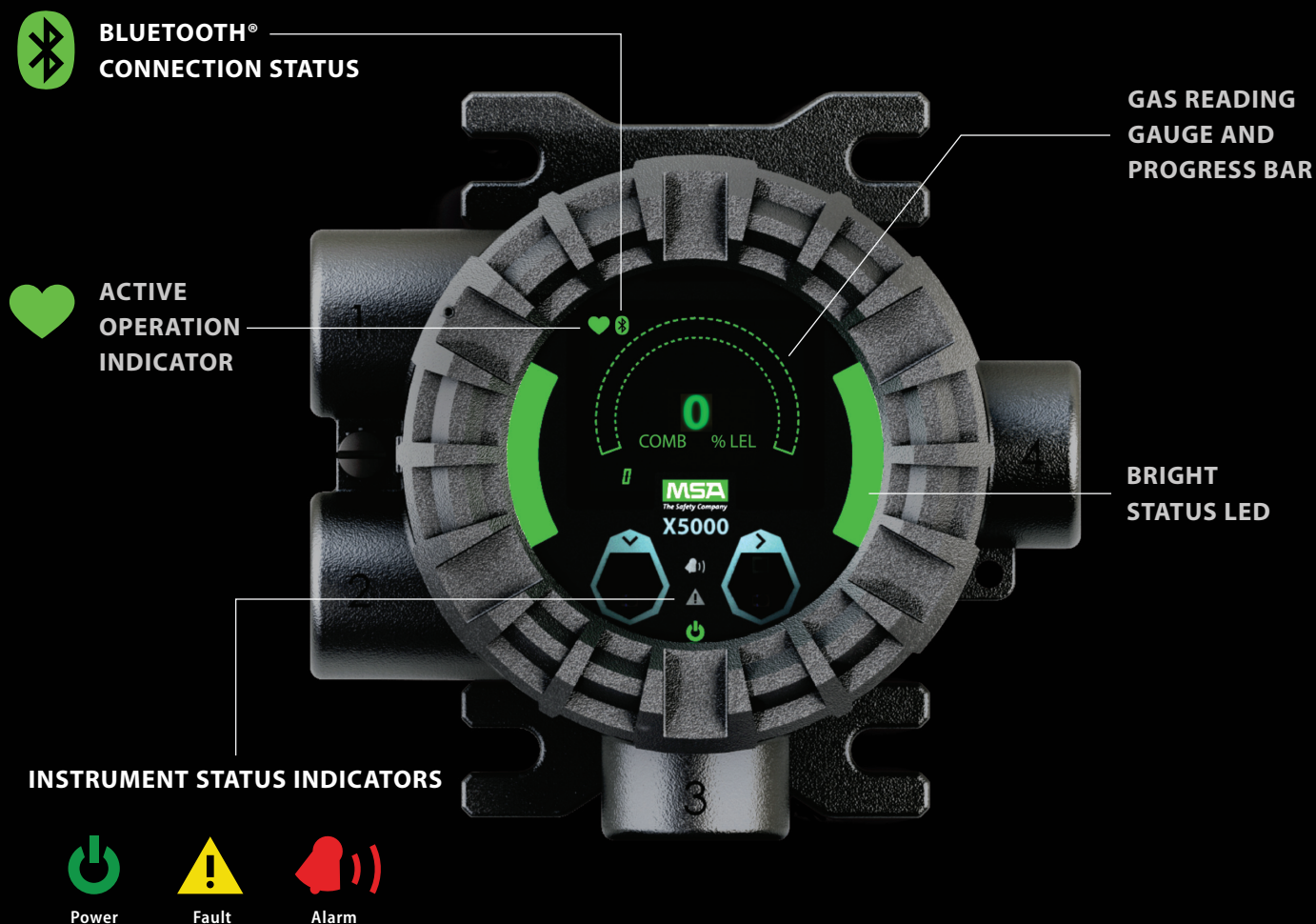
"WONDERING IF THE GAS DETECTOR IS WORKING"

YOU HAVEN'T BEEN ABLE TO DO ANYTHING ABOUT IT... UNTIL NOW

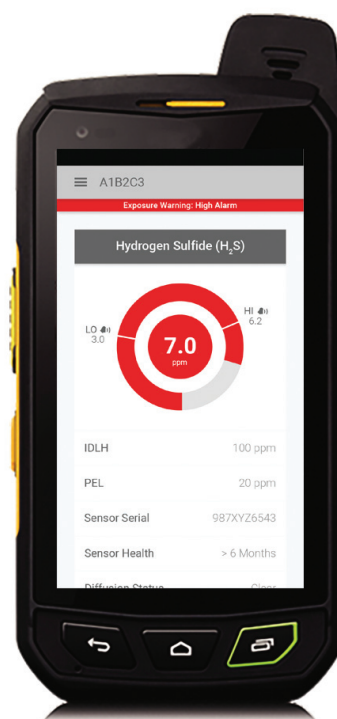*"LOSING MY MAGNET... I HAVE BIGGER THINGS TO WORRY ABOUT"*

ALL NEW DESIGN

**BLUETOOTH®
CONNECTION STATUS**

**ACTIVE
OPERATION
INDICATOR**

**GAS READING
GAUGE AND
PROGRESS BAR**

**BRIGHT
STATUS LED**

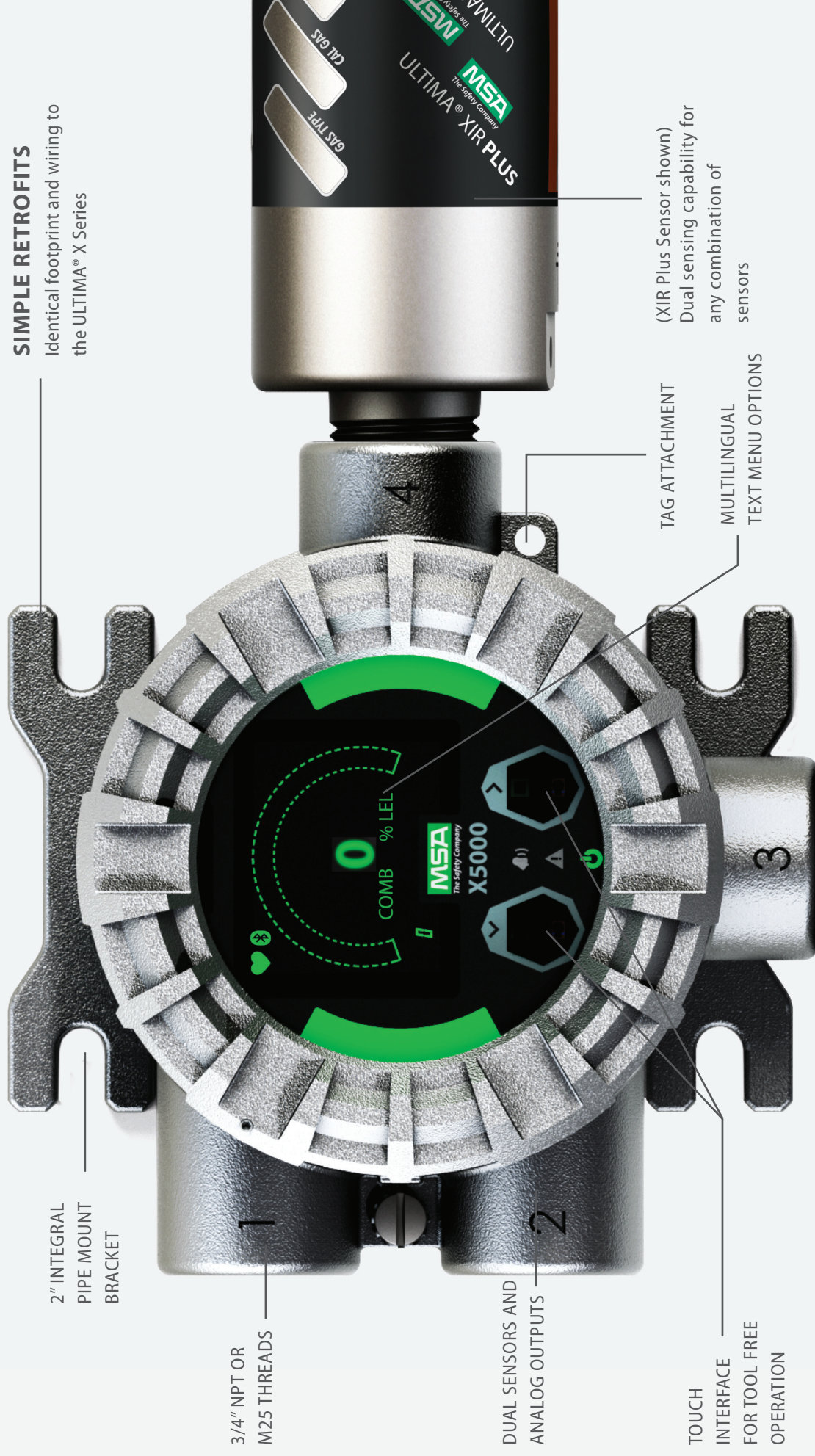**INSTRUMENT STATUS INDICATORS**

Power   Fault   Alarm

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%

MSAsafety.com/detection

Do More with Less

1 Transmitter = 2X Sensing Power

SIMPLE RETROFITS
Identical footprint and wiring to the ULTIMA® X Series

(XIR Plus Sensor shown)
Dual sensing capability for any combination of sensors

TAG ATTACHMENT

MULTILINGUAL TEXT MENU OPTIONS

2" INTEGRAL PIPE MOUNT BRACKET

3/4" NPT OR M25 THREADS

DUAL SENSORS AND ANALOG OUTPUTS

TOUCH INTERFACE FOR TOOL FREE OPERATION

COMB % LEL
0
MSA X5000

SafeSwap®

Safely and quickly replace sensors without turning off the instrument

Combustible, Toxic or Oxygen Digital Sensors

POWERED BY

XCell®
S E N S O R S

WITH

TruCal®
PLATFORM

(ACTUAL SIZE)

MATERIAL OPTIONS
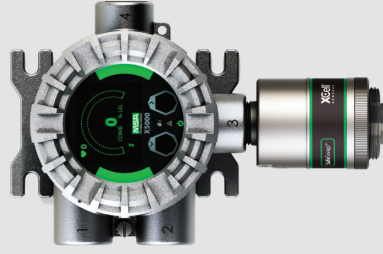
STAINLESS STEEL
Ultra Corrosion Resistant
8.8 lbs

NEW ADVANCED SENSOR TECHNOLOGY

Up to **1.5 YEARS** between calibrations!

XCell® SENSORS

MSA	Industry Avg

Longer Sensor Life

O_2
- MSA: 5 yrs
- Industry Avg: 1 yr

Toxic (CO/H_2S)
- MSA: 5 yrs
- Industry Avg: 2-3 yrs

Longer Warranties
- MSA: 3 yrs
- Industry Avg: 2 yr

Higher Temperature
- MSA: +60C
- Industry Avg: +50C

10x Better Resolution for H_2S
- MSA: 0.1ppm
- Industry Avg: 1ppm

TruCal® TECHNOLOGY

*only CO & H_2S XCell Sensors

MSA	Industry Avg

Better Stability (Lower Drift)

Sensor Stability (% Original Output)

MSA

Industry Avg

50%
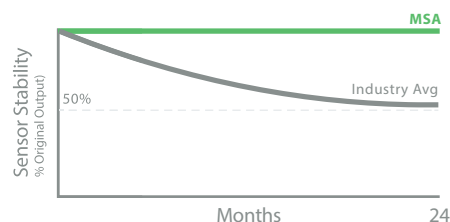
Months — 24

Longer Calibration Cycles
- MSA: 18 months
- Industry Avg: 4.5 months

Worry-Free Operation

✓

Automatically self-checks 4x/day

* Data may vary for different gases and configurations

IT MAKES SENSE...NO EXCEPTIONS

MSA
The Safety Company

5 years
EXPECTED LIFE

3 years
WARRANTY

12⁺
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**

* Based on 10 sensors and 2 sensors/transmitter

Questions about sensor placement?

MSA's new 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 for more information:
https://us.msasafety.com/gas-mapping

MSAsafety.com/detection

MSA

The Safety Company
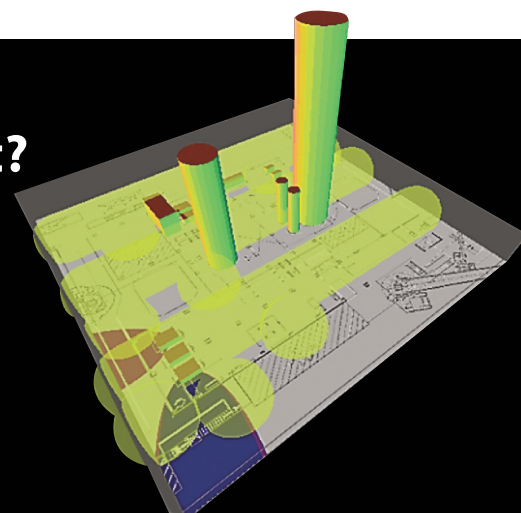
ULTIMA X5000 Gas Monitor Specifications

PRODUCT SPECIFICATIONS

COMBUSTIBLE GAS SENSOR TYPE	Catalytic Bead (XCell Comb)
	Infrared (XIR PLUS)
TOXIC GAS & OXYGEN SENSOR TYPE	Hydrogen Sulfide H_2S (XCell Toxic)
	Carbon Monoxide CO (XCell Toxic)
	Carbon Monoxide CO H_2-Resistant (XCell Toxic)
	Oxygen O_2 (XCell O_2)
SENSOR MEASURING RANGES	Combustible: 0-100% LEL
	H_2S: 0-10, 0-50, 0-100 ppm
	CO: 0-100, 0-500, 0-1000 ppm
	CO-H_2 Resist: 0-100 ppm
	O_2: 0-25%
TYPICAL SENSOR LIFE	5 years – XCell Sensors
	10 years - infrared

SENSOR PERFORMANCE*	T90 (TYPICAL)	REPEATABILITY	ZERO DRIFT (PER YEAR)
XIR PLUS	<2 sec.	≤ +/- 1% LEL	<5% LEL
XCELL COMB	<22 sec.	≤ +/- 1% LEL	<5% LEL
XCELL H_2S	<23 sec.	+/- 5%	<1% full scale
XCELL O_2	<15 sec.	≤ +/- 0.3% Vol	0.2% Vol
XCELL CO	<9 sec.	+/- 5%	<1% full scale

APPROVALS CLASSIFICATION	**US Divisions**
	Class I Div 1 Groups A-D, T5, Type 4X, IP66
	Class II Div 1 Groups E-G, T6; Class III
	US Zones
	Class I Zone 1 AEx db IIC T5 Gb
	Class II Zone 21 AEx tb IIIC T85°C Db
	Global Zones
	Ex db IIC T5 Gb
	Ex tb IIIC T85°C Db
WARRANTY	X5000 Transmitter: 2 years
	XIR PLUS: 10 years source, 5 years electronics
	XCell Sensors: 3 years
APPROVALS	CSA, ATEX, IECEx, CE Marking.
	Complies with C22.2 No. 152, FM 6320, ANSI/ISA 12.13.01, ATEX/ IEC: EN 60079-29-1
	Suitable for SIL 2

ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE RANGE	XCell: -40°C to +60°C
	XIR PLUS: -40°C to +60°C
	(may differ by gas, see manual)
STORAGE TEMPERATURE RANGE	-40°C to +60°C
RELATIVE HUMIDITY (NON-CONDENSING)	10-95% (XCell Toxics & O2)
	0-95% (XCell Comb)
	0-95% (XIR PLUS)

* Typical response at standard temperature and pressure test 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.

ISO 9001 CERTIFIED Quality System

MECHANICAL SPECIFICATIONS

INPUT POWER	10 to 30 VDC, 3 wire, <5W nominal
SIGNAL OUTPUT	Dual 4-20 mA current source, HART, Bluetooth. Optional: w/o Bluetooth
RELAY RATINGS	5A @ 30VDC; 5A @220 VAC (3X) SPDT – fault, warn, alarm
RELAY MODES	Common, discrete, horn

NOMINAL MAX POWER (W/ RELAYS)	
XIR PLUS	6.7W
XCell Comb	5.5W
XCell Toxic & O_2	2.8W
XIR PLUS and XCell Comb	9.6W
XIR PLUS and XCell Toxic & O_2	7.0W
Dual XIR PLUS	11.6W
Dual XCell Toxic & O_2	3.6W
Dual XCell Comb	10.6W
Dual XCell Comb and XCell Toxic & O_2	5.5W

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 Angle 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, calibration faults, general system
WIRING REQUIREMENTS	3-wire (single sensor) or 4-wire (dual sensor) shielded cable. *Refer to manual for mounting distances and wire gauge.*

DIMENSIONS

5.88 [149.4]
2.70 [68.58]
4.50 [114.3]
5.71 [144.93]
10.15 [257.78]

Single XCell Sensor

4.86 [123.44]

Deep Lid (relay board)

13.42 [340.97]

Dual Sensor (XCell and XIR PLUS)

3.86 [98.04]

Short Lid (no relays)

Weight: 8.8 lbs (4 kg) - 316 SS

*MSA**safety**.com/detection*