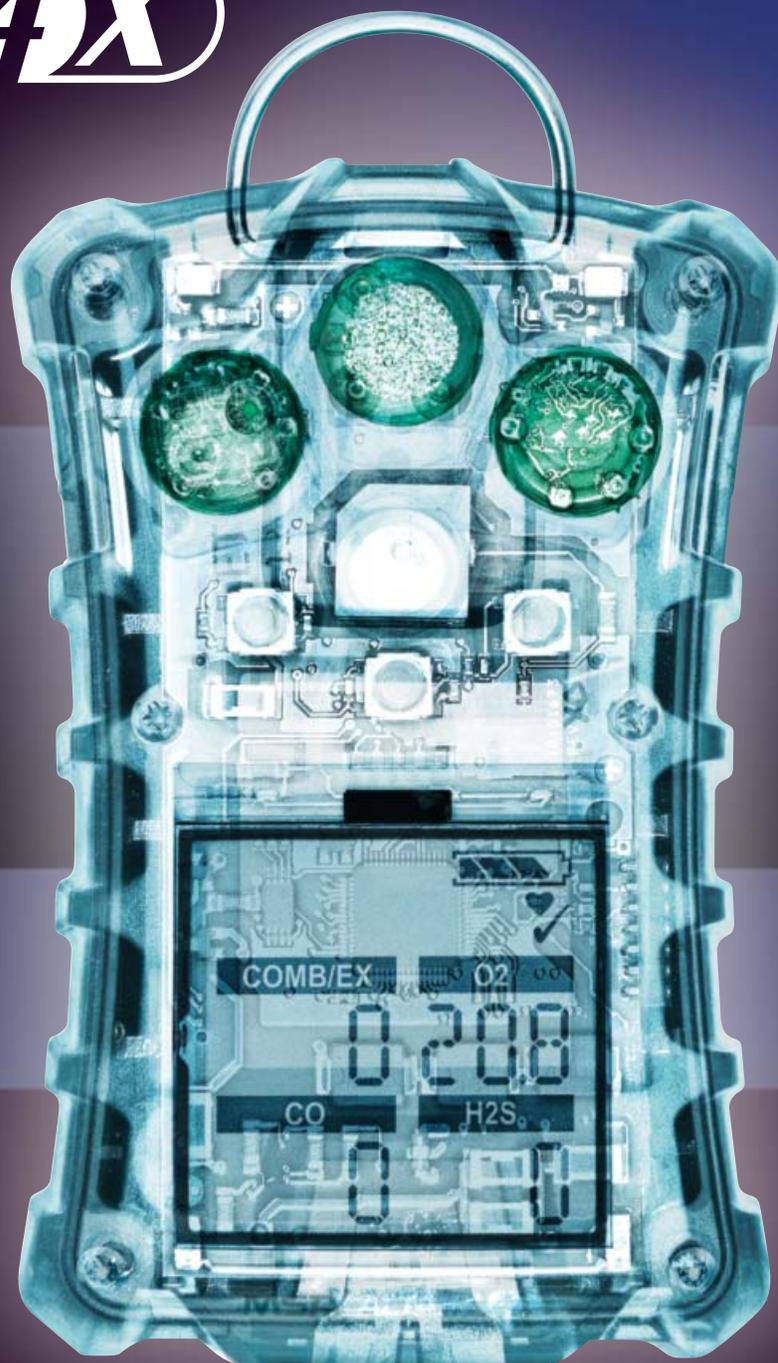


# ALTAIR<sup>®</sup> 4X

## IT'S WHAT'S INSIDE THAT COUNTS

ALTAIR 4X Multigas Detector  
With MSA XCell<sup>®</sup> Sensor Technology



**MSA**  
The Safety Company

# IT'S WHAT'S INSIDE THAT COUNTS

**OUR VISION OF SAFETY** Workers who face potentially hazardous situations deserve the best protection available. At MSA, we work tirelessly to build smarter, better gas detection instruments that people across the world can rely on. To that end, we're proud to introduce the most advanced technology available in any portable gas detector on the market:

**the ALTAIR 4X Multigas Detector with XCell Sensor Technology.**

## Built on Durability

The ALTAIR 4X Multigas Detector for LEL, O<sub>2</sub>, CO, H<sub>2</sub>S (with CO-H<sub>2</sub> res, H<sub>2</sub>S-LC, SO<sub>2</sub> or NO<sub>2</sub> option) is as tough and functional as it looks. A rugged housing provides unsurpassed durability, including the ability to survive a 20-foot drop. And with large, glove-friendly buttons and a high-contrast display, the ALTAIR 4X Multigas Detector is easy to operate in any work environment, even low-light conditions.

## Powered by Performance

Toughness and durability aren't the whole story. The real strength of the ALTAIR 4X Multigas Detector comes from new sensor technology. MSA XCell Sensors have a typical life of more than four years, double the industry average, and are engineered using MSA's proprietary application-specific integrated circuit (ASIC) design. By miniaturizing sensor controlling electronics and placing them inside the sensor itself, MSA XCell Sensors offer superior stability, accuracy and repeatability.

MSA XCell Sensors are a breakthrough in chemical and mechanical sensor design, enabling faster response and span calibration times. With less time spent on calibration and bump tests, you save calibration gas, maintenance costs and in turn, save money. But most importantly, in your industry, saving seconds on response time can also mean saving lives.

## Count on the ALTAIR 4X Detector

Exclusive safety features like MotionAlert™ and InstantAlert™ make the ALTAIR 4X Multigas Detector ideal for applications like confined space entry. The MotionAlert sensor activates when a user becomes disabled and motionless, quickly alerting others to the disabled user's location. And with a simple push of a button, the InstantAlert feature enables users to manually alert others to potentially hazardous situations.

The ALTAIR 4X Multigas Detector outlasts the competition. To prove it, the instrument comes with a full three-year warranty, an entire year longer than the industry average, so that you can depend on the ALTAIR 4X Multigas Detector to withstand the wear and tear that other portable gas detectors can't.

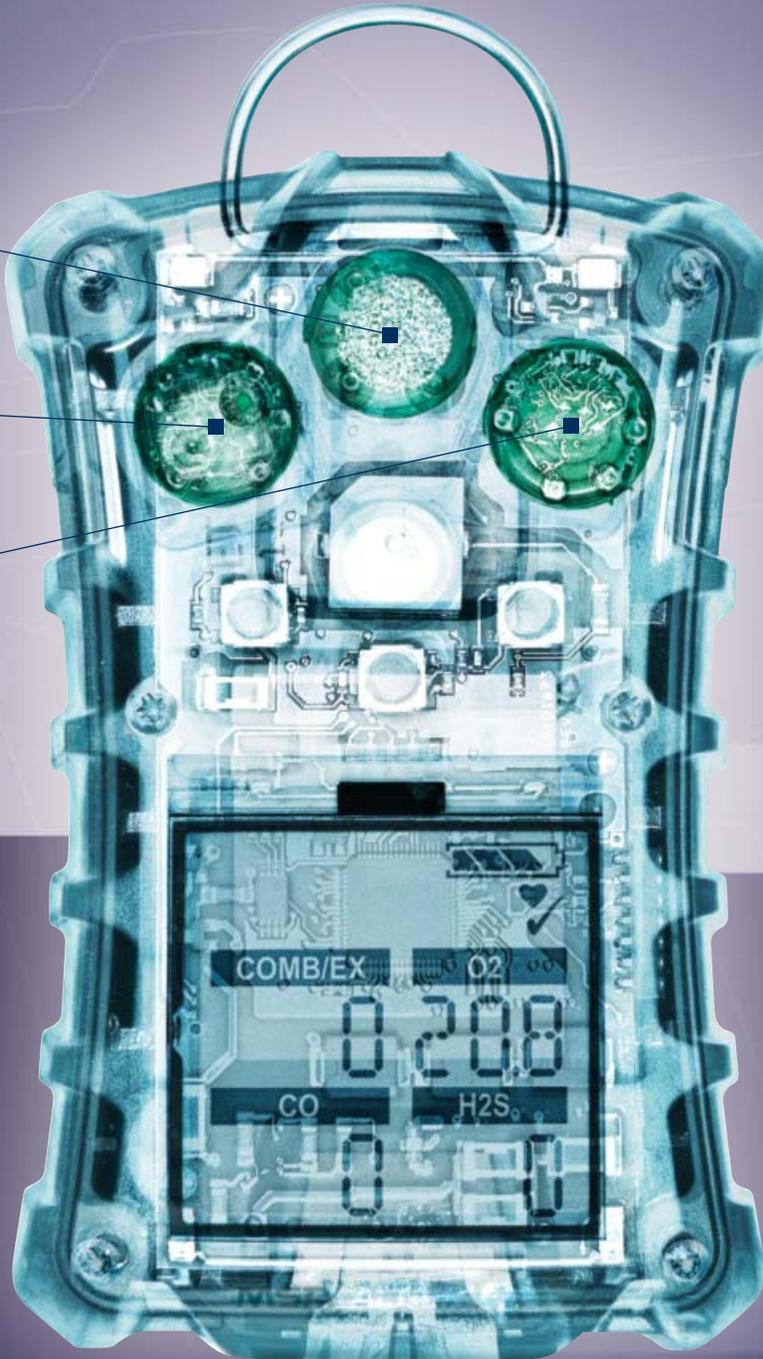
# XCell<sup>®</sup>

S E N S O R S

MSA XCell  
Combustible Sensor

MSA XCell CO/H<sub>2</sub>S  
Sensor\*

MSA XCell  
Oxygen Sensor



Adding microelectronics inside the sensors provides more control and higher performance than previous generations



MSA XCell Sensors are a breakthrough in chemical and mechanical sensor design, enabling faster response and span calibration times

**THE MSA COMMITMENT** FROM THE LATEST IN SENSOR TECHNOLOGY TO INSTRUMENT DESIGN AND MANUFACTURING, MSA HAS THE CAPABILITIES AND KNOWLEDGE TO SUPPORT YOUR PORTABLE GAS DETECTION CHALLENGES.

\*Ask MSA for more sensor options

## MSA XCell Technology:

# Save Time, Save Money, Save Lives

**Built upon years of sensor design experience, MSA is revolutionizing sensor technology with breakthroughs in design that improve performance.**

- Sensor response and clear times in less than 15 seconds
- Bump test in less than 15 seconds
- 60-second span calibration time
- Greater signal stability and repeatability under changing or extreme environmental conditions
- Two-tox CO/H2S sensor with virtually no cross-channel interference
- The digital output of the sensors makes them much less susceptible to RF interference

**With reliable, extended-life XCell Sensors, there's no need to replace sensors after two years.**

- Typical life greater than four years
- Laser-welded sensor housings eliminate opportunities for leaks
- Combustible sensor's proprietary operating mode enhances poison resistance over the sensor's life
- End-of-sensor-life warning gives advanced notice to user, reducing service outages

## Technology That's Tough

### Life-Saving Performance

- Large buttons and a bright display enable quick and easy operation even while wearing gloves
- If a user becomes disabled due to unforeseen hazards, the MotionAlert sensor will activate after 30 seconds
- The InstantAlert feature enables users to manually alert others of a dangerous situation with the push of a button
- Compatible with Galaxy® Test System
- MSA Link™ Pro and MSA Link Software-ready
- Global approvals for worldwide acceptance

### Lasting Durability

- Full three-year warranty supports the entire instrument, including sensors and battery
- Withstands extreme impacts with rugged polycarbonate housing
- Passes 20-ft drop test
- IP67-rated ALTAIR 4X Detector is both dust- and water-tight

### Applications

- Oil, gas and petrochemical • Pharmaceutical • Chemical • Confined spaces • Fire service
- Utilities and telecommunications • Municipal works, waste water • Mining



**New glow-in-the-dark housing for mining or confined spaces applications**

**MSA**



■ MSA-exclusive feature

## Technical Specifications

Gas	Range	Resolution
LEL	0-100% LEL	1%
O <sub>2</sub>	0-30% vol	0.1% vol
CO or CO-H <sub>2</sub> res	0-1999 ppm	1 ppm
H <sub>2</sub> S or H <sub>2</sub> S-LC	0-200 or 0-100 ppm	1 ppm or 0.1 ppm

Option: SO<sub>2</sub> or NO<sub>2</sub> 0-20 or 0-50 ppm 0.1 ppm

**Drop test** 20 ft

**Housing** Rugged rubberized armor

**Weight** 7.9 oz

**Dimensions (L x W x D)** 4.4 x 3.0 x 1.31

**Audible alarm** >95 dB at 1 ft

**Visual alarm** 4 ultra-bright LEDs on top and bottom

**Vibrating alarm** Standard

**MotionAlert & InstantAlert** Optional

**Display** High-contrast LCD

**Backlight** Adjustable time-out

**Battery** Rechargeable li-polymer

**Run time** 24 hours @ room temperature

**Charging time** < 4 hrs

**Operating temperature range** -10° C to +40° C

**Extended temperature range** -20° C to +50° C

**Short period (15 minutes) temperature range** -40° C to +60° C

**Humidity** 15 – 90% RH non-condensing

**Ingress protection** IP67

**Data log** (adjustable) 50-hour minimum

**Event log** Standard 500 events

**Standard warranty** 3 years

**Extended warranty** Optional 1-year

For additional customized versions and calibration gases, use MSA's ATO ordering sheet or contact MSA Customer Service at 1-800-MSA-2222.

**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.



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## ALTAIR 4X Detector with 3-year warranty, data logging, charger, calibration cap, and tubing

### Approvals

U.S./CAN	ATEX	ANZ	Configuration	Case Color
10107602	10110453	10110447	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S	Charcoal
10107603	10110456	10110450	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S	Phosphorescent
10110443	10110454	10110448	LEL, O <sub>2</sub> , CO	Charcoal
10110445	10110457	10110451	LEL, O <sub>2</sub> , CO	Phosphorescent
10110444	10110455	10110449	LEL, O <sub>2</sub>	Charcoal
10110446	10110458	10110452	LEL, O <sub>2</sub>	Phosphorescent
10148343	—	—	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S-LC	Charcoal

## ALTAIR 4X Detector, 4-gas, in black case with calibration cylinder and 0.25 lpm regulator

U.S./CAN Approval	Configuration	Case Color
10110488	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S	Charcoal

## ALTAIR 4X GALAXY GX2 Automated Test System

N. America	EU	UK	AUS	Configuration
10128630	10128639	10128659	10128669	1 cylinder, charging
10128629	10128638	10128658	10128668	Up to 4 cylinders, charging
10128642	10128651	10128661	10128671	1 cylinder, non-charging
10128641	10128640	10128660	10128670	Up to 4 cylinders, non-charging

### Calibration Gas

10048280	Gas cylinder (34 l) 1.45% CH <sub>4</sub> , 15% O <sub>2</sub> , 60 ppm CO, 20 ppm H <sub>2</sub> S
10045035	Gas cylinder (54 l) 1.45% CH <sub>4</sub> , 15% O <sub>2</sub> , 60 ppm CO, 20 ppm H <sub>2</sub> S

### Replacement Sensors

10106722	XCell Ex Combustible Sensor
10106729	XCell O <sub>2</sub> Sensor
10106725	XCell CO/H <sub>2</sub> S Two-tox Sensor
10121213	XCell CO/H <sub>2</sub> S-LC Two-tox Sensor
10121214	XCell CO H <sub>2</sub> -RES/H <sub>2</sub> S Two-tox Sensor
10121215	XCell SO <sub>2</sub> /H <sub>2</sub> S-LC Two-tox Sensor
10121217	XCell NO <sub>2</sub> /CO Two-tox Sensor

### Accessories

10152669	ALTAIR Pump Probe (U.S./CAN)
10153039	ALTAIR Pump Probe No Charger (U.S./CAN)
10152668	ALTAIR Pump Probe Euro Charger (ATEX/IEC)
10153040	ALTAIR Pump Probe No Charger (ATEX/IEC)

### Approvals (pending)

**United States**  
 ETL Class I, Div. 1, Groups A,B,  
 C&D Tamb=-40°C to +54°C  
 ETL Class II, Div.1, Groups E,F&G  
 Class III, Div. 1 Tamb=-40°C to +54°C; T4

**Canada**  
 CSA Class I, Div. 1, Groups A,B,C&D  
 CAN/CSA C22.2 152; 12.13.01-2000  
 ETL Class II, Div.1, Groups E,F&G  
 Class III, Div. 1 Tamb=-40°C to +54°C; T4

**ATEX**  
 II 1G Ex ia IIC T4, -40°C to +60°C, IP67  
 (Zone 0 with no combustible sensor installed)  
 II 2G Ex ia d IIC T4, -40°C to +60°C, IP67  
 (Zone 1 with combustible sensor installed)

**IEC**  
 Ex ia IIC T4, -40°C to +60°C  
 (Zone 0 with no combustible sensor installed)  
 Ex ia d IIC T4, -40°C to +60°C  
 (Zone 1 with combustible sensor installed)

**Australia / New Zealand**  
 Ex ia s IIC T4, -40°C to +60°C, IP67 (Zone 0)

