

IT'S WHAT'S INSIDE THAT COUNTS

ALTAIR 4X Multigas Detector With MSA XCell® Sensor Technology





MSA Link[™] Software-ready

MotionAlert feature signals "man down"

InstantAlertfeature allows users to manually alert others to a dangerous situation

Large buttons for easy operation

End-of-sensor-life warning

Large, high-contrast liquid crystal display COMB/EX O2

MSA ALTAIR OX

Rugged stainless steel clip

Ultra-bright LEDs on unit's top and bottom

MSA XCell Sensors with protected sensor inlet

95+ dB alarm

24-hour battery run time

Easy bump-check mode with 24-hour checkmark indicator

Durable, rubberized housing for secure grip

IT'S WHAT'S INSIDE THAT COUNTS

OUR VISION OF SAFETY Workers who face potentially dangerous situations deserve the best protection available. At MSA, we work tirelessly to build smarter, better gas detection instruments upon which people of the world rely. 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, CO, H2S, and O2 is as tough and functional as it looks. 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 the sensors' 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 Multigas Detector

Exclusive safety features such as MotionAlert[™] and InstantAlert[™] features make the ALTAIR 4X Multigas Detector ideal for applications such as confined space entry. MotionAlert feature 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, 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 you can depend upon the ALTAIR 4X Multigas Detector to withstand the wear and tear that other portable gas detectors can't.

XCEII®
SENSORS

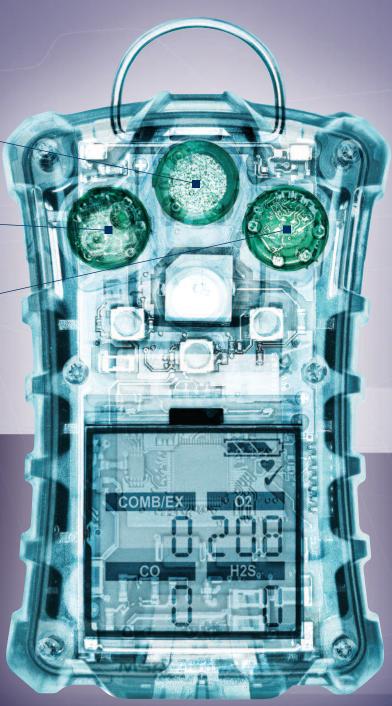
MSA XCell Combustible Sensor

MSA XCell CO/H2S 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.

MSA XCell Technology:

Save Time, Save Money, Save Lives

Building on years of sensor design experience, MSA has revolutionized sensor technology with breakthroughs that improve performance.

- · Sensor response and clear times under 15 seconds
- Bump test under 15 seconds
- · Span calibration time of 60 seconds
- Greater signal stability and repeatability under changing or extreme environmental conditions
- Two-tox CO/H2S sensor with virtually no cross-channel interference
- · Sensor digital output reduces RF interference susceptibility

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 helps it to resist poisons 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 bright display enable quick and easy operation even while wearing gloves
- If a user becomes disabled due to unforeseen hazards, MotionAlert feature will activate after 30 seconds
- InstantAlert feature enables users to manually alert others of a potentially hazardous situation with the push of a button
- Compatible with Galaxy® Test System and ALTAIR 4 QuickCheck® Station
- MSA Link[™]Software-ready
- Global approvals for worldwide acceptance

Lasting Durability

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

Applications

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



New glow-inthe-dark housing for mining or confined spaces applications



Technical Specifications		
Gas	Range	Resolution
LEL	0-100%	1%
O_2	0-30% vol	0.1% vol
CO	0-1999 ppm	1 ppm
H_2S	0-200 ppm	1 ppm
H₂S-LC	0-100 ppm	0.1 ppm

Drop test	20 feet
Housing	Rugged rubberized
	armor
Weight	7.9 07

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 Standard

Vibrating alarm 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 -20° C to $+50^{\circ}$ C

Short Period Operation -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.

ALTAIR 4X Multigas 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 ₂ , CO, H ₂ S	Charcoal
10107603	10110456	10110450	LEL, O ₂ , CO, H ₂ S	Phosphorescent
10110443	10110454	10110448	LEL, O ₂ , CO	Charcoal
10110445	10110457	10110451	LEL, O ₂ , CO	Phosphorescent
10110444	10110455	10110449	LEL, O ₂	Charcoal
10110446	10110458	10110452	LEL, O ₂	Phosphorescent

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

and oils ipin regulator			
U.S./CAN Approval	Configuration	Case Color	
10110488	LEL, O ₂ , CO, H ₂ S	Charcoal	
10110489	LEL, O ₂ , CO, H ₂ S with Universal Pump Probe	Charcoal	

ALTAIR 4 Galaxy Automated Test System

Power Supply		
North America	Global	Configuration
10089998	10090001	Standard system
10089996	10090000	Standard system with charging capability and cylinder holder
10089969	10089970	Smart system (memory card)
10089967	10089966	Smart system (memory card) with charging capability and cylinder holder

Calibration Gas

10048280	Gas cylinder (34 l) 1.45% CH4, 15% O2, 60 ppm CO, 20 ppm H2S
10045035	Gas cylinder (54 l) 1.45% CH4, 15% O2, 60 ppm CO, 20 ppm H2S

Replacement sensors

10106722	XCell Ex Combustible Sensor
10106729	XCell O ₂ Sensor
10106725	XCell CO/H ₂ S Two-tox Sensor
10121213	XCell CO/H ₂ S-LC Two-tox Sensor

Accessories

100555/6	Universal Pump Probe (U.S./CAN
10047594	Universal Pump Probe (ANZ/IEC)
10047596	Universal Pump Probe (ATEX)

Approvals

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)

Offices and representatives worldwide For further information:

Power of Numbers

800-321-339

shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified any warnings or cautions provided have been thoroughly read and

ID 0802-50-MC / Dec 2011

Note: This bulletin contains only

individuals and not until the product instructions including

understood. Only they contain

the complete and detailed information concerning proper use and care of these products.

a general description of the products

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