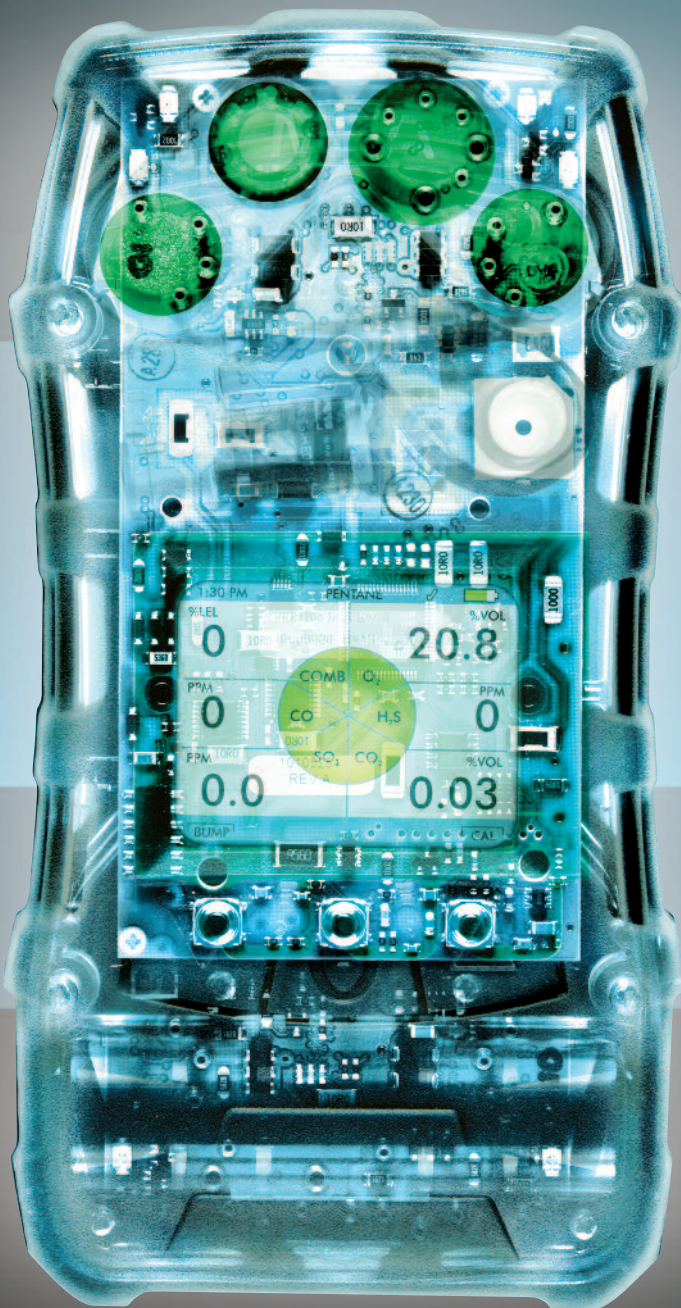


ALTAIR® 5X

IT'S WHAT'S INSIDE THAT COUNTS

ALTAIR 5X Multigas Detector
With MSA XCell® Sensor Technology



Fully compatible with MSA Link Software and MSA Galaxy Automated Test System

Variety of optional MSA infrared sensors

Robust integral pump for consistent flow

High contrast color or monochrome display

18 language options

Large buttons for easy operation

Advanced MotionAlert and InstantAlert safety features

High performance MSA XCell Sensors

24-hour bump checkmark

End of XCell Sensor life warning

Durable, rubberized housing for secure grip



■ MSA-exclusive feature

IT'S WHAT'S INSIDE THAT COUNTS

WORKERS who face potentially dangerous situations deserve the best protection available. At MSA, we work tirelessly to build smarter, better gas detection instruments that people across the world rely on. First we introduced MSA's advanced technology with the ALTAIR 4X Multigas Detector with XCell Sensors. Now we're proud to introduce the expansion of the most advanced technology available in any portable gas detector on the market:
the ALTAIR 5X Multigas Detector with XCell Sensor Technology.

Built on Durability

The ALTAIR 5X Multigas Detector for LEL, O₂, and toxic gas detection is as tough and functional as it looks. A rugged polycarbonate housing provides unsurpassed durability, including the ability to survive a 10-foot drop. Inside, a field-proven integral pump provides consistent gas flow without the problems of externally-attached components. Ergonomic design, glove-friendly buttons, and high-contrast display make the ALTAIR 5X Multigas Detector easy to use in all applications.

Powered by Performance

Toughness and durability aren't the whole story. The real strength of the ALTAIR 5X Multigas Detector comes from new sensor technology. MSA XCell Sensors have a typical life of more than 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.

In addition to MSA XCell Sensors, the ALTAIR 5X Multigas Detector can also be equipped with our wide variety of IR sensors covering many gases and ranges including CO₂.

Flexibility to Meet Your Needs

MSA's ALTAIR 5X Multigas Detector provides many options to fit various applications. The detector is configurable with either a high-resolution color or monochrome LCD display with multilingual capabilities. MSA's Logo Express[®] Service option is available to customize the color display. The detector is easily configurable with interchangeable plug-and-play sensor slots for MSA XCell Sensors. Up to six gases can be monitored simultaneously.

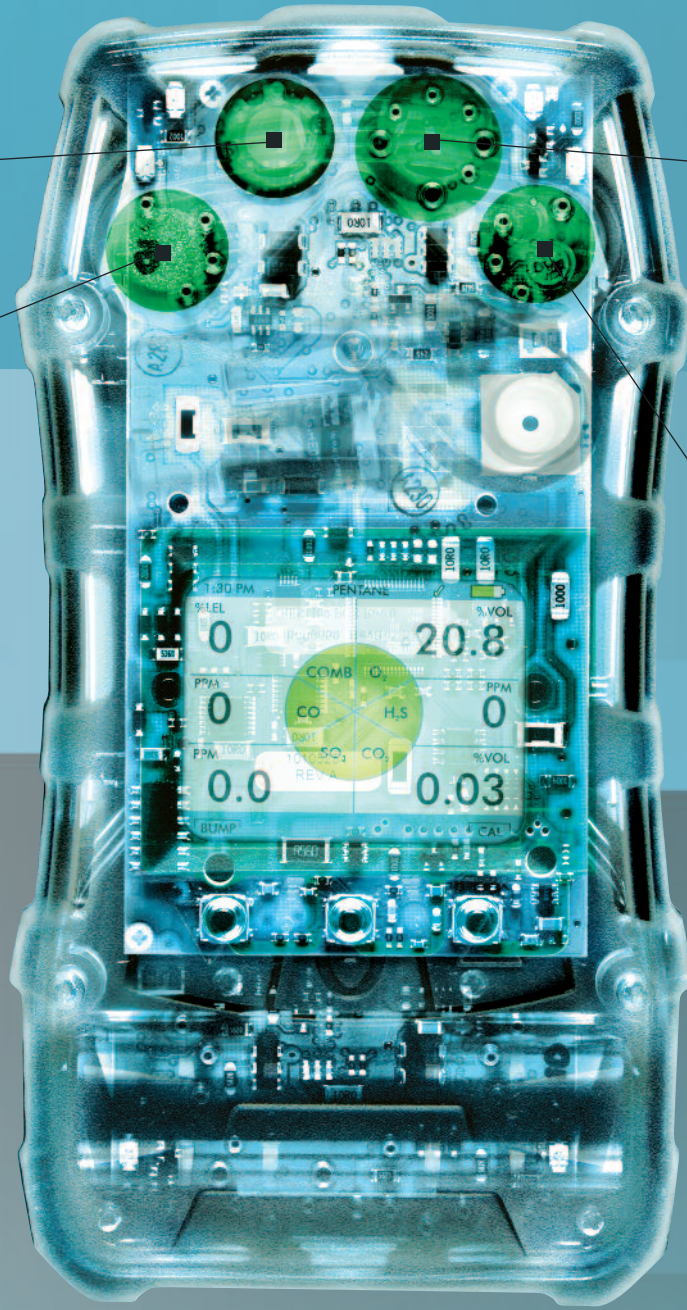
Furthermore, this multigas detector offers optional glow-in-the-dark instrument housing for IR sensor-equipped units. The ALTAIR 5x Multigas Detector's lithium-ion battery lasts up to 20 hours, allowing it to be used over multiple shifts. An alkaline battery pack is also available as an accessory. MSA's ALTAIR 5X Multigas Detector is fully compatible with the MSA GALAXY[®] Automated Test System and MSA Link[™] Software.

"We liked how the total cost of ownership package was presented to us."

– Safety Director at energy company

XCell[®]

S E N S O R S



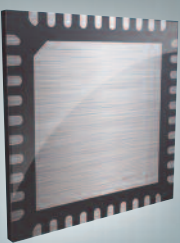
MSA XCell O₂ Sensor

MSA XCell Ex Sensor, combustible

MSA XCell SO₂, Cl₂, or NH₃ Sensor

Additional exotic sensors: ClO₂, HCN, PH₃, NO₂

MSA XCell CO/H₂ 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 EXPERTISE TO SUPPORT YOUR PORTABLE GAS DETECTION CHALLENGES.

MSA XCell Technology:

Save Time, Save Money, Save Lives

Building on years of sensor design experience, MSA is revolutionizing sensor technology with breakthroughs in design that improve performance.

- New XCell exotic SO₂, Cl₂, and NH₃ Sensors for expanded monitoring applications
- Sensor response and clear times in under 15 seconds for most common sensor configurations
- Bump test in under 15 seconds for most common sensor configurations
- Span calibration time of 60 seconds for most common sensor configurations
- Greater signal stability and repeatability under changing or extreme environmental conditions
- All XCell Sensors are capable of plug-and-play capabilities for easy reconfiguration

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

- Typical life greater than four years for combustible, O₂, CO/H₂S, and SO₂ sensors
- Typical life greater than three years for NH₂ and Cl₂ sensors
- Combustible sensor proprietary operating mode helps it stand up to poisons over the life of the sensor
- End-of-sensor-life warning gives advanced notice to user, reducing service outages

Three-year back-to-back instrument warranty includes CO/H₂S/O₂/LEL/SO₂ and IR sensors

Two-year warranty on NH₃ and Cl₂; minimum 12-month warranty on other sensors

Count on the ALTAIR 5X Detector

Exclusive MotionAlert™ and InstantAlert™ features make the ALTAIR 5X Multigas Detector ideal for applications such as confined space monitoring. 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 5X 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 5X Multigas Detector to withstand the wear and tear that other portable gas detectors can't.

*Three year warranty is for most common sensor configurations.



Online Training and Product Simulation

MSA's recent improvements to online training and Web content include the new ALTAIR 5X Multigas Detector media simulator which takes viewers through instrument operation. This tool is found at <http://www.msanet.com/altair5x>.

"The three-year warranty is huge."

– Safety Manager at energy company

Technical Specifications

Gas type	Range	Resolution
Combustible	0-100%	LEL 1% LEL
Oxygen	0-30%Vol	0.1%Vol
Carbon monoxide	0-2000 ppm	1 ppm
Hydrogen sulfide	0-200 ppm	1 ppm
Sulfur dioxide	0-20 ppm	0.1 ppm
Chlorine	0-20 ppm	0.1 ppm
Ammonia	0-100 ppm	1 ppm
Nitrogen dioxide	0-20 ppm	0.5 ppm
Chlorine dioxide	0-1 ppm	0.01 ppm
Phosphine	0-5 ppm	0.1 ppm
Hydrogen cyanide	0-30 ppm	0.1ppm
Carbon dioxide, CO ₂	0-10%Vol	0.01%Vol
Butane, C ₄ H ₁₀	0-25%Vol	0.1%Vol
Methane, CH ₄	0-100%Vol	1%Vol
Propane, C ₃ H ₈	0-100%Vol	1%Vol

Drop test	10 feet
Housing	Rugged rubberized armor
Weight	1 lb (without IR sensor)
Dimensions (L x W x D)	6.69" H x 3.49" W x 1.79" D without belt clip (without IR sensor)
Audible alarm	>95 dB typical
Visual alarm	2 ultra-bright LEDs on top
Vibrating alarm	Standard
MotionAlert & InstantAlert features display	Standard High-contrast monochrome or color display
Backlight	Adjustable time-out
Battery	Rechargeable li-ion or AA alkaline
Run time	20 hrs @ room temperature
Charging time	<= 6 hours
Operating temperature	-20 C to + 50C
Short-period operation	-40 C to + 50C
Humidity	15-90% RH non-condensing
Ingress protection	IP65
Data log	Adjustable 200 hrs minimum
Event log	Standard 1000 events
Standard warranty	3 years on CO, H ₂ S, LEL, O ₂ , SO ₂ , and IR sensors 2 years on NH ₃ , Cl ₂ sensors 1 year on other sensors

ALTAIR 5X Detector with 3-year warranty, monochrome display, data logging, charger, integral pump, and tubing

Approvals		
U.S.	Canada	Configuration
10116924	10115118	LEL, O ₂ , CO, H ₂ S
10116925	10115119	LEL, O ₂ , CO, H ₂ S, SO ₂

ALTAIR 5X Detector Industrial Kits - monochrome display, integral pump, 10 ft sampling line, and 1 ft probe

10116926	10115120	LEL, O ₂ , CO, H ₂ S
10116927	10115141	LEL, O ₂ , CO, H ₂ S, SO ₂

ALTAIR 5X Detector Deluxe Kits - color display, integral pump, 10 ft sampling line, and 1ft probe

10116928	10115142	LEL, O ₂ , CO, H ₂ S
10116929	10115143	LEL, O ₂ , CO, H ₂ S, SO ₂

Altair 5X Galaxy Automated Test System

North America	Global	Configuration
10090603	10090606	Standard system
10090602	10090605	Standard system with charging capability and cylinder holder
10090594	10090595	Smart system (memory card)
10090592	10090591	Smart system (memory card) with charging and cylinder holder

Calibration Gas

10048280	Calibration gas cylinder (34 l) 1.45% CH ₄ , 15% O ₂ , 60 ppm CO, 20 ppm H ₂ S
10045035	Calibration gas cylinder (54 l) 1.45% CH ₄ , 15% O ₂ , 60 ppm CO, 20 ppm H ₂ S
10117738	Calibration gas cylinder (58L), 1.45% CH ₄ , 15% O ₂ , 60 ppm CO, 20 ppm H ₂ S, 10 ppm SO ₂
10098855	Calibration gas cylinder(34L), 1.45% CH ₄ , 15% O ₂ , 60 ppm CO, 20 ppm H ₂ S, 10 ppm SO ₂

Replacement Sensors

10080222	ClO ₂ Sensor	10106726	XCell NH ₃ Sensor
10080224	NO ₂ Sensor	10106727	XCell SO ₂ Sensor
10106375	HCN Sensor	10106728	XCell Cl ₂ Sensor
10106722	XCell Ex Sensor, combustible	10106729	XCell O ₂ Sensor
10106725	XCell CO/H ₂ S Sensor	10116638	PH3 Sensor

Accessories

10082834	USB IR receiver	10114837	Battery pack, Alkaline
10088099	MSA Link Software CD		

Approvals (pending)

USA / Canada

Class I, Division 1, Groups A, B, C & D
Class II, Division 1, Groups E, F & G
Class III, Division 1
Ambient temperature: -40 C to +50 C; T4
ALTAIR 5X Multigas Detector with alkaline battery pack T3/T4
ALTAIR 5X or ALTAIR 5X iR Multigas Detector with rechargeable battery pack T4

USA / Canada

Class I, Division 1, Groups A, B, C & D
CAN/CSA C22.2 No. 152 Combustible Gas Detection Instruments
C22.2 No. 152 Performance Ambient Temperature: -20 C to +50 C
C22.2 No. 157 Intrinsic Safety Ambient Temperature: -40 C to +50 C
ALTAIR 5X Multigas Detector with alkaline battery pack T3/T4
ALTAIR 5X or ALTAIR 5X iR Multigas Detector with rechargeable battery pack T4

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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