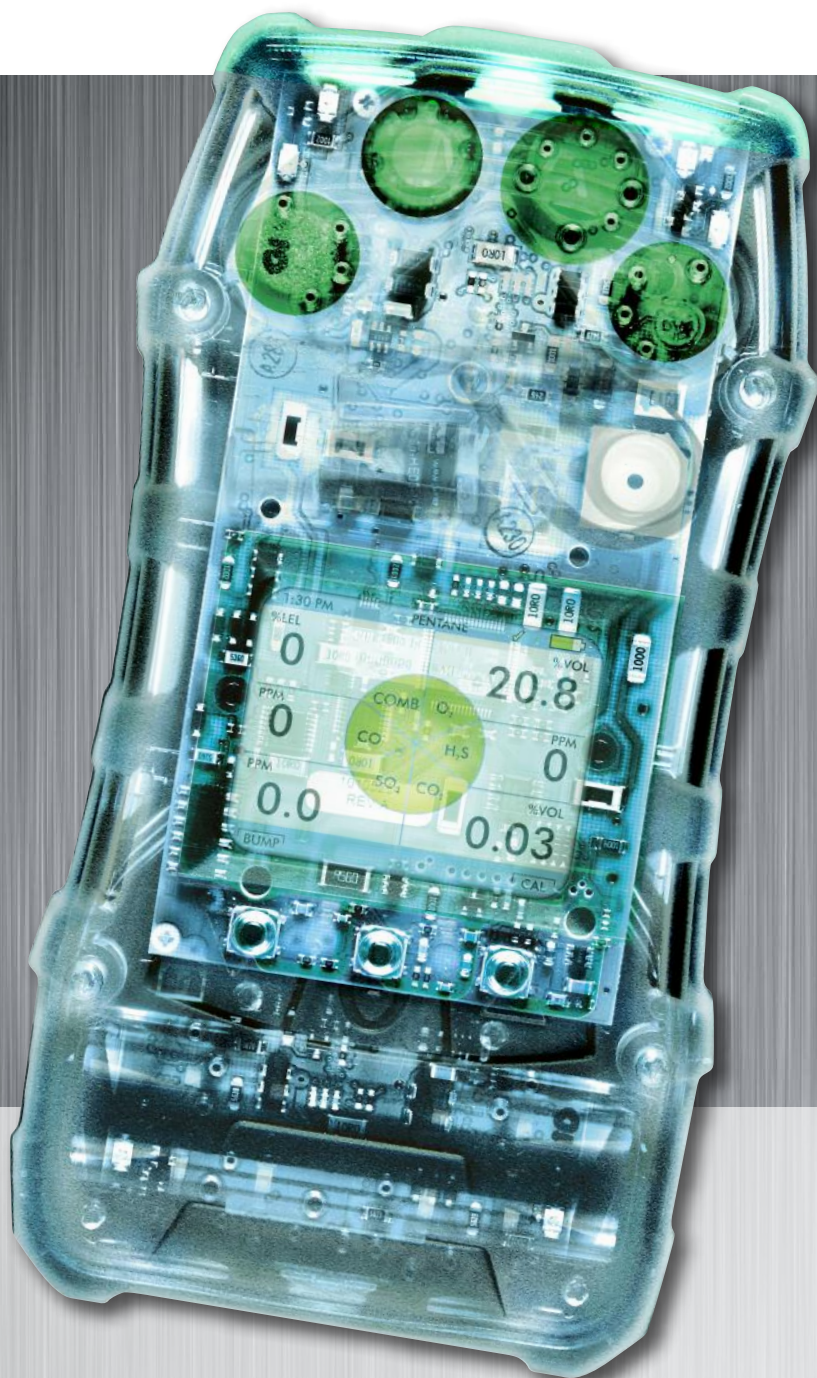


# ALTAIR® 5X Multi-Gas Detector

Powered by MSA XCell® Sensor Technology



*IT'S WHAT'S  
INSIDE THAT  
COUNTS...*



**XCell™**  
SENSORS



*Because every life has a **purpose...***

## Performance **beyond what you see**

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***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 that people across the world rely on. First we introduced MSA's advanced technology with the ALTAIR 4X Multi-Gas 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 Multi-Gas Detector with XCell Sensor Technology.**

### Built on Durability

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The ALTAIR 5X Multi-Gas Detector for combustible gases in % LEL and/or % Volume range, O<sub>2</sub>, 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 3 m 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 Multi-Gas Detector easy to use in all applications.

### Powered by Performance

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Toughness and durability aren't the whole story. The real strength of the ALTAIR 5X Multi-Gas Detector comes from 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 Multi-Gas Detector can also be equipped with our wide variety of IR sensors covering many gases and ranges including CO<sub>2</sub>.

### Flexibility to Meet Your Needs

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MSA's ALTAIR 5X Multi-Gas Detector provides many options to fit various applications. The detector is configurable with either a high-resolution colour or monochrome LCD display with multilingual capabilities. MSA's Logo Express® Service option is available to customize the colour 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 Multi-Gas Detector offers optional glow-in-the-dark instrument housing for IR sensor-equipped units. The ALTAIR 5X Multi-Gas 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 Multi-Gas Detector is fully compatible with the GALAXY® GX2 Automated Test System, MSA Link Pro and MSA Link Software.

### The MSA Commitment

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From the latest in sensor technology to instrument design and manufacturing, MSA has the capabilities and knowledge to support your portable gas detection challenges.



# XCell<sup>®</sup>

## SENSORS

MSA XCell O<sub>2</sub>,  
CO-HC or  
Two-Tox Sensor

MSA XCell EX Sensor,  
combustible

MSA XCell SO<sub>2</sub>,  
Cl<sub>2</sub> or NH<sub>3</sub> Sensor

Additional Exotic  
Sensors: ClO<sub>2</sub>, HCN,  
PH<sub>3</sub>, NO and NO<sub>2</sub>

MSA XCell  
Exotic, CO-HC or  
Two-Tox Sensor

**MSA XCell  
Two-Tox Sensors:**

CO/H<sub>2</sub>S  
CO/H<sub>2</sub>S-LC  
CO H<sub>2</sub>-RES/H<sub>2</sub>S  
NO<sub>2</sub>/CO



Adding micro-electronics 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  
calibration times.



## 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.**

- XCell exotic SO<sub>2</sub>, Cl<sub>2</sub>, and NH<sub>3</sub> 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, O<sub>2</sub>, CO/H<sub>2</sub>S, CO/NO<sub>2</sub>, CO-HC and SO<sub>2</sub> sensors
- Typical life greater than three years for NH<sub>3</sub>, and Cl<sub>2</sub> 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 LEL/O<sub>2</sub>/CO/H<sub>2</sub>S/NO<sub>2</sub>/SO<sub>2</sub> XCell and IR sensors**

**Two-year warranty on NH<sub>3</sub> and Cl<sub>2</sub> XCell; minimum one-year warranty on other sensors**

## ALTAIR 5X in Connection with alpha Personal Network

The Wireless USB option enables the integration of ALTAIR 5X into the alpha Personal Network. This monitoring and alarm system consists of modular and wireless components that can be individually integrated to enhance your operation's safety and capability as needed. The ALTAIR 5X W-USB can monitor operative personnel using breathing apparatus and portable gas detection equipment while sending information to the central control station alphaBASE. All gas readings and alarms can be seen by incident command monitoring personnel in real time thanks to the entry control software, alphaCONTROL 2.

### Full Monitoring

alpha Personal Network system can be used in several combinations for a wide variety of applications, for example when you work alone on large or complex sites, when you need to work under chemical suits, or when you want to keep an eye on all your crew members), including full telemetric monitoring of gas alarms, pressure and motion for breathing apparatus and chemical protection suits wearers.

For more information please see alpha Personal Network leaflet 01-050.2.





Wireless USB option for connectivity to alpha Personal Network (Selected locations)

Fully compatible with MSA Link Software and MSA GALAXY GX2 Automated Test System

Variety of optional MSA infrared sensors

High contrast colour or monochrome display

Advanced MotionAlert and InstantAlert Safety Features

Large buttons for easy operation

Robust integral pump for consistent flow

High performance MSA XCell Sensors

24-hour bump checkmark

End of XCell Sensor life warning

18 language options

Durable, rubberized housing for secure grip

Glow-in-the-dark housing available for IR sensor-equipped instruments



■ MSA-exclusive feature

## Technical Specifications and Ordering Information

Gas Type	Range	Resolution
Combustible, LEL	0–100 % LEL	1 % LEL
Oxygen, O <sub>2</sub>	0–30 % Vol	0.1 % Vol
Carbon monoxide, CO	0–1,999 ppm	1 ppm
CO H <sub>2</sub> -Resistant	0–1,999 ppm	1 ppm
CO-High Concentration	0–10,000 ppm	5 ppm
Hydrogen sulfide, H <sub>2</sub> S	0–200 ppm	1 ppm
H <sub>2</sub> S-Low Concentration	0–100 ppm	0.1 ppm
Sulfur dioxide, SO <sub>2</sub>	0–20 ppm	0.1 ppm
Nitrogen dioxide, NO <sub>2</sub>	0–50 ppm	0.1 ppm
Chlorine, Cl <sub>2</sub>	0–20 ppm	0.1 ppm
Ammonia, NH <sub>3</sub>	0–100 ppm	1 ppm
Nitrogen oxide, NO	0–200 ppm	1 ppm
Nitrogen dioxide, NO <sub>2</sub>	0–20 ppm	0.1 ppm
Chlorine dioxide, ClO <sub>2</sub>	0–1 ppm	0.01 ppm
Phosphine, PH <sub>3</sub>	0–5 ppm	0.1 ppm
Hydrogen cyanide, HCN	0–30 ppm	0.1 ppm
Carbon dioxide, CO <sub>2</sub>	0–10 % Vol	0.01 % Vol
Butane, C <sub>4</sub> H <sub>10</sub>	0–25 % Vol	0.1 % Vol
Methane, CH <sub>4</sub>	0–100 % Vol	1 % Vol
Propane, C <sub>3</sub> H <sub>8</sub>	0–100 % Vol	1 % Vol
Propane, C <sub>3</sub> H <sub>8</sub>	0–100 % LEL	1 % LEL

Technical Specifications	
Drop test	3 m
Ingress protection	IP65
Housing	Rugged rubberized armor
Weight	453 g or 680 g (IR version)
Dimensions (L x W x D)	16.9 x 8.9 x 4.2 cm (5.0 cm for IR version) without belt clip
Audible alarm	>95 dB typical
Visual alarm	2 ultra-bright LEDs on top
Vibrating alarm	Standard
MotionAlert & InstantAlert	Standard
Display	High-contrast monochrome or colour display
Backlight	Adjustable time-out
Battery	Rechargeable lithium-ion battery and optional Alkaline (non-IR equipped units)
Run time	>20 hours run time @ room temperature
Charging time	<= 6 hours
Operating temperature	0 to +40 °C
Extended temperature	–20 to +50 °C
Short-period operation	–40 to +50 °C
Humidity	15–90 % RH non-condensing
Data log	(Adjustable) average of 200 hours (at 1-minute intervals)
Event log	Standard 1000 events
Standard warranty	3-year including LEL/O <sub>2</sub> /CO/H <sub>2</sub> S/NO <sub>2</sub> /SO <sub>2</sub> XCell Sensors and IR Sensors, NH <sub>3</sub> and Cl <sub>2</sub> ; 2 years, other sensors: 1 year





Additional ALTAIR 5X versions, calibration gas cylinders, sensors and accessories are available.

ALTAIR 5X Multi-Gas Detector with 3-year warranty, data logging, charger, integral pump and tubing	
Part Number	Configuration
10119615	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, 0–10 % CO <sub>2</sub> – colour display
10119632	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, NH <sub>3</sub> – colour display
10119616	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, SO <sub>2</sub> – colour display
10119649	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S – colour display, Wireless USB
10119600	LEL, O <sub>2</sub> , CO, H <sub>2</sub> S – monochrome display

GALAXY GX2 Automated Test System	
10128637	GALAXY GX2, ALTAIR 5/5X, 1 valve
10128636	GALAXY GX2, ALTAIR 5/5X, 4 valves
10105756	Smart Electronic Cylinder Holder with integrated DFR
Calibration Gas	
10053022	Gas can (58 l) (1.45 % CH <sub>4</sub> , 15.0 % O <sub>2</sub> , 60 ppm CO, 20 ppm H <sub>2</sub> S)
10102853	Gas can (58 l) (1.45 % CH <sub>4</sub> , 15.0 % O <sub>2</sub> , 60 ppm CO, 20 ppm H <sub>2</sub> S, 2.5 % CO <sub>2</sub> )
10122425	Gas can (34 l) (1.45 % CH <sub>4</sub> , 60 CO, 20 H <sub>2</sub> S, 15 % O <sub>2</sub> , 10 SO <sub>2</sub> )

Replacement Sensors	
10106722 XCell LEL	10114750 NO
10106729 XCell O <sub>2</sub>	10080224 NO <sub>2</sub>
10106725 XCell CO/H <sub>2</sub> S Two-Tox	10080222 ClO <sub>2</sub>
10121214 XCell CO H <sub>2</sub> RES/H <sub>2</sub> S Two-Tox	10116638 PH <sub>3</sub>
10121213 XCell CO/H <sub>2</sub> S-LC Two-Tox	10106375 HCN
10121217 XCell CO/NO <sub>2</sub> Two-Tox	10145738-SP IR %Vol CO <sub>2</sub>
10121216 XCell CO-HC	10145739-SP IR %Vol Butane
10106727 XCell SO <sub>2</sub>	10145752-SP IR %Vol Methane
10106728 XCell Cl <sub>2</sub>	10145740-SP IR %Vol Propane
10106726 XCell NH <sub>3</sub>	10145751-SP IR %LEL Propane

Accessories	
10099648 Leather holster	10082834 JetEye IR Adapter w/ USB Connector
10103189 Sampling line, 3 m, PU conductive	10114838 Battery pack, alkaline
10159431 Sampling line, 30 m, PU conductive	10127428 Vertical multi-unit charger for four ALTAIR 5X
10103191 Sampling probe, flexible 30 cm	10152079 Carrying case

Approvals	
ATEX  – II 2G Ex d ia mb IIC Gb IP65 Zone 1 (w XCell Ex sensor)	
ATEX  – II 1G Ex ia IIC Ga IP65 Zone 0 (w/o XCell Ex sensor)	
ATEX  – II 2G Ex d e ia mb IIC T4 Gb IP65 (ALTAIR 5X IR)	
EN 50270 Type 2, EN 61000-6-3	
MED  2010/68/EU	

### Your direct contact

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