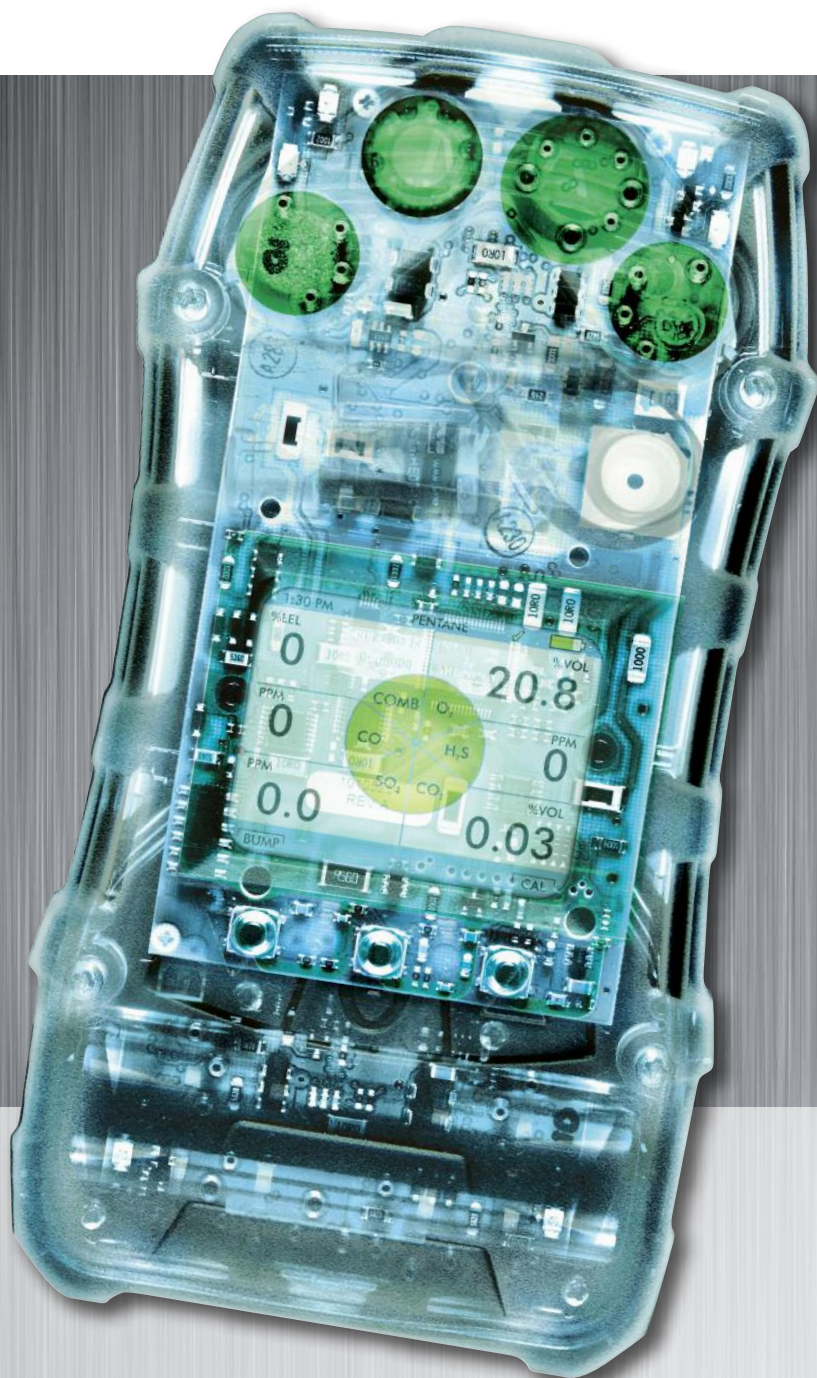


ALTAIR® 5X Multi-Gas Detector

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**



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

The ALTAIR 5X Multi-Gas Detector for combustible gases in % LEL and/or % Volume range, 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 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

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 CO₂.

Flexibility to Meet Your Needs

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

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[®]

SENSORS

MSA XCell O₂,
CO-HC or
Two-Tox Sensor

MSA XCell EX Sensor,
combustible



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 SO₂,
Cl₂ or NH₃ Sensor

Additional Exotic
Sensors: ClO₂, HCN,
PH₃, NO and NO₂

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

**MSA XCell
Two-Tox Sensors:**

CO/H₂S
CO/H₂S-LC
CO H₂-RES/H₂S
NO₂/CO



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 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, CO/NO₂, CO-HC and SO₂ sensors
- Typical life greater than three years for NH₃, 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 LEL/O₂/CO/H₂S/NO₂/SO₂ XCell and IR sensors

Two-year warranty on NH₃ and Cl₂ XCell; minimum one-year warranty on other sensors

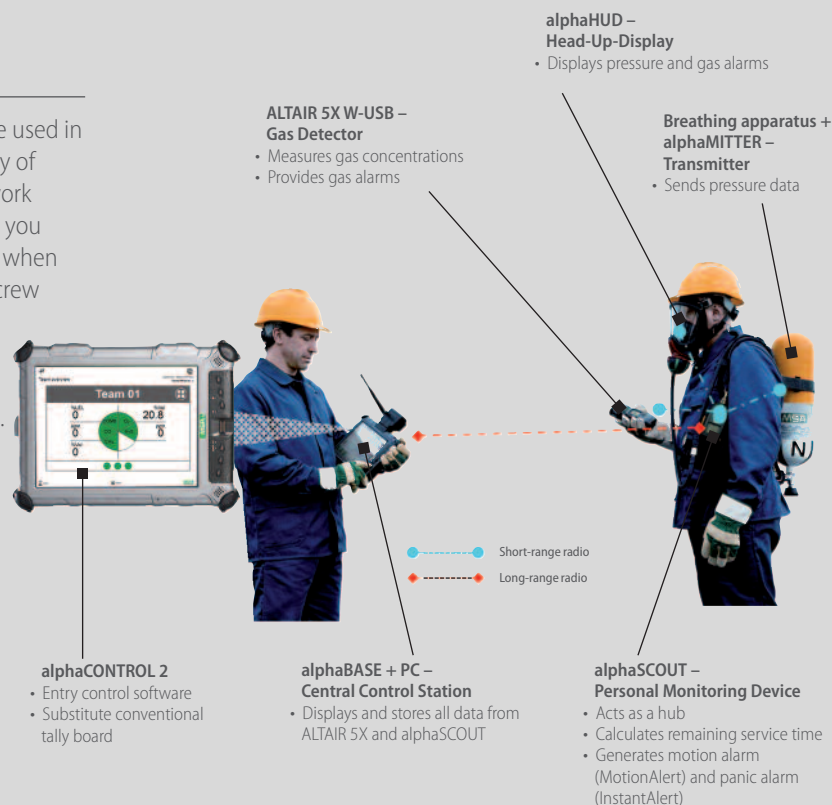
ALTAIR 5X in Connection with alpha Personal Network

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 ₂ | 0–30 % Vol | 0.1 % Vol |
| Carbon monoxide, CO | 0–1,999 ppm | 1 ppm |
| CO H ₂ -Resistant | 0–1,999 ppm | 1 ppm |
| CO-High Concentration | 0–10,000 ppm | 5 ppm |
| Hydrogen sulfide, H ₂ S | 0–200 ppm | 1 ppm |
| H ₂ S-Low Concentration | 0–100 ppm | 0.1 ppm |
| Sulfur dioxide, SO ₂ | 0–20 ppm | 0.1 ppm |
| Nitrogen dioxide, NO ₂ | 0–50 ppm | 0.1 ppm |
| Chlorine, Cl ₂ | 0–20 ppm | 0.1 ppm |
| Ammonia, NH ₃ | 0–100 ppm | 1 ppm |
| Nitrogen oxide, NO | 0–200 ppm | 1 ppm |
| Nitrogen dioxide, NO ₂ | 0–20 ppm | 0.1 ppm |
| Chlorine dioxide, ClO ₂ | 0–1 ppm | 0.01 ppm |
| Phosphine, PH ₃ | 0–5 ppm | 0.1 ppm |
| Hydrogen cyanide, HCN | 0–30 ppm | 0.1 ppm |
| 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 |
| Propane, C ₃ H ₈ | 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 ₂ /CO/H ₂ S/NO ₂ /SO ₂ XCell Sensors and IR Sensors, NH ₃ and Cl ₂ : 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 ₂ , CO, H ₂ S, 0–10 % CO ₂ – colour display |
| 10119632 | LEL, O ₂ , CO, H ₂ S, NH ₃ – colour display |
| 10119616 | LEL, O ₂ , CO, H ₂ S, SO ₂ – colour display |
| 10119649 | LEL, O ₂ , CO, H ₂ S – colour display, Wireless USB |
| 10119600 | LEL, O ₂ , CO, H ₂ 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 ₄ , 15.0 % O ₂ , 60 ppm CO, 20 ppm H ₂ S) |
| 10102853 | Gas can (58 l) (1.45 % CH ₄ , 15.0 % O ₂ , 60 ppm CO, 20 ppm H ₂ S, 2.5 % CO ₂) |
| 10122425 | Gas can (34 l) (1.45 % CH ₄ , 60 CO, 20 H ₂ S, 15 % O ₂ , 10 SO ₂) |

| Replacement Sensors | |
|---|-------------------------------------|
| 10106722 XCell LEL | 10114750 NO |
| 10106729 XCell O ₂ | 10080224 NO ₂ |
| 10106725 XCell CO/H ₂ S Two-Tox | 10080222 ClO ₂ |
| 10121214 XCell CO H ₂ RES/H ₂ S Two-Tox | 10116638 PH ₃ |
| 10121213 XCell CO/H ₂ S-LC Two-Tox | 10106375 HCN |
| 10121217 XCell CO/NO ₂ Two-Tox | 10145738-SP IR %Vol CO ₂ |
| 10121216 XCell CO-HC | 10145739-SP IR %Vol Butane |
| 10106727 XCell SO ₂ | 10145752-SP IR %Vol Methane |
| 10106728 XCell Cl ₂ | 10145740-SP IR %Vol Propane |
| 10106726 XCell NH ₃ | 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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For contact details of your local MSA affiliate, please visit our website.