MSA
The Safety Company

ALTAIR® 5X **Multigas Detector**

With MSA XCell® Sensor Technology

IT'S WHAT'S INSIDE THAT COUNTS

Now with advanced PID for VOC Detection

Because every life has a ***purpose…***

IT'S WHAT'S INSIDE THAT COUNTS

WORKERS who face potentially hazardous 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. First we introduced MSA's advanced technology with the ALTAIR 4X Multigas Detector with XCell Sensors. Now we're proud to offer the most advanced sensor technology available in a six-gas portable instrument: ***The ALTAIR 5X Multigas Detector with XCell Sensor Technology and PID option.***

Built upon Durability

The ALTAIR 5X Multigas Detector for combustible gases in % LEL and/or % volume range, O_2 and toxic gas detection is as tough and functional as it looks. A rugged, rubberized polycarbonate housing provides unsurpassed durability, including the ability to survive a 3-meter 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 for all applications.

Powered by Performance

Toughness and durability are only part of the story. The real strength of the ALTAIR 5X Multigas Detector comes from state-of-the-art sensor technology. By miniaturizing sensor-controlling electronics and placing them inside the sensor itself, MSA XCell Sensors offer superior stability, accuracy, repeatability and a typical life more than double the industry average.

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

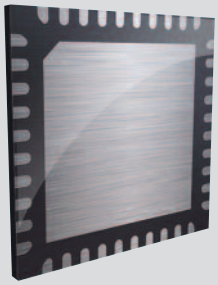
In addition to MSA XCell Sensors, the ALTAIR 5X can be equipped with advanced PID options for VOC detection. Our wide variety of IR sensors covers many gases and ranges including CO_2.

Flexibility & Connectivity to Meet Your Needs

MSA's ALTAIR 5X Multigas Detector is configurable with either high-resolution color or monochrome LCD display with 18 built-in languages. MSA's Logo Express® Service is available to customize the color display. Interchangeable plug-and-play slots for MSA XCell Sensors indicated means up to six gases can be monitored simultaneously.

The ALTAIR 5X is fully compatible with the MSA GALAXY GX2 Automated Test System and MSA Link™ Pro and MSA Link Software to efficiently manage your entire fleet.

XCell® SENSORS



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.

Save Time, Save Money, Save Lives

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

- XCell exotic SO_2, NO_2, Cl_2 and NH_3 Sensors for expanded monitoring applications
- Sensor response and clear times in less than 15 seconds for most common sensor configurations
- Bump test in less than 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 installation for easy reconfiguration

With reliable, extended-life XCell Sensors, there's no need to replace sensors after 2 years.

- Typical life greater than 4 years for Combustible, O_2, CO/H_2S (and variants) , CO/NO_2, CO-HC and SO_2 sensors
- Typical life greater than three years for NH_3 and Cl_2 sensors
- Combustible sensor proprietary operating mode helps maintain poison-resistance throughout sensor life
- End-of-sensor-life warning gives advanced notice to user, reducing service outages

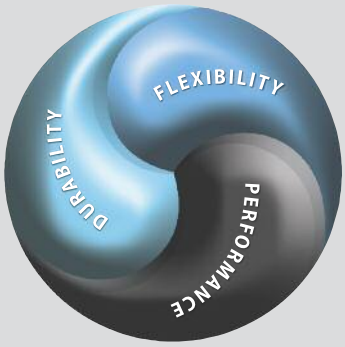
3-year back-to-back instrument warranty includes LEL, O_2, CO, H_2S, SO_2, NO_2 XCell and IR sensors

2-year warranty on NH_3 and Cl_2; minimum 12-month warranty on other sensors

Count on the ALTAIR 5X Multigas Detector

Exclusive MotionAlert™ and InstantAlert™ features make the ALTAIR 5X Multigas Detector ideal for applications such as confined space monitoring. **MotionAlert** activates when a user becomes disabled and motionless, quickly alerting others as to the disabled user's location. And with a simple push of a button, **InstantAlert** enables users to manually warn others of potentially hazardous situations.

The ALTAIR 5X is the Long-Life leader. To prove it, the instrument comes with a full 3-year warranty,* an entire year longer than the industry average, so that you can depend upon the ALTAIR 5X to withstand the punishment that other portable gas detectors can't.



Online Product Simulator

Feel free to use ALTAIR 5X Multigas Detector simulator that takes viewers through instrument operation. This tool, available in several languages, is found at http://webapps.msanet.com/altair5xsimulator/default.aspx.

Find all our simulators at http://webapps.msanet.com/gasdetectionsimulators/.

* 3-year warranty is for most common sensor configurations.

ALTAIR 5X **Multigas Detector Features**

FULLY COMPATIBLE WITH MSA LINK™ AND LINK PRO SOFTWARE AND MSA GALAXY® GX2 TEST SYSTEM

VARIETY OF OPTIONAL MSA INFRARED SENSORS

ROBUST INTEGRAL PUMP FOR CONSISTENT FLOW AND IMPROVED DURABILITY

HIGH CONTRAST COLOR OR MONOCHROME DISPLAY

ADVANCED OPTIONAL VOC DETECTION

18 LANGUAGE OPTIONS

LARGE BUTTONS FOR EASY OPERATION

ADVANCED MOTIONALERT AND INSTANTALERT FEATURES

HIGH PERFORMANCE MSA XCELL SENSORS

BLUETOOTH WIRELESS CONNECTIVITY

24-HOUR BUMP CHECKMARK

XCELL SENSOR **END-OF-LIFE INDICATOR**

DURABLE, RUBBERIZED HOUSING FOR SECURE GRIP

MSA-exclusive feature

Complete Solutions

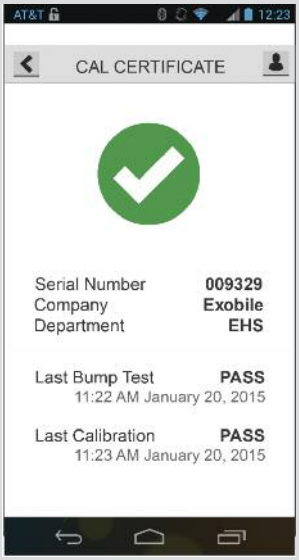
The ALTAIR 5X Detector with advanced PID (photoionization) sensor options sets the gas detection bar even higher to meet evolving and diverse needs for VOC detection. PIDs are required tools not only for industrial hygiene, HazMat and specialized detection applications, but are increasingly a key element for safety teams and industrial operations. The unmatched durability of the ALTAIR 5X with advanced XCell Sensor technology is now combined with PID to provide a complete platform for users around the world.
What's more, PID instrument data can now seamlessly integrate into MSA's proven fleet management infrastructure.

Bluetooth Wireless Technology

By incorporating Bluetooth as a standard feature, MSA brings the benefits of wireless safety to everyone.

By downloading the free MSA Portable Instrument APP available in multiple languages, from Google Play, any compatible Android device becomes an enhanced safety and productivity tool when paired with the ALTAIR 5X.

- Get gas detection readings and man-down alerts
- Configure instruments remotely
- Automate gas detector records and events
- Drive greater productivity and greater workflow efficiency
- Achieve supervisory awareness of worker safety
- Send gas alarms via text or email



Technical Specifications and Ordering Information

Gas Type	Range	Resolution
Combustible	0–100 % LEL	1 % LEL
Combustible	0–5 % Vol, CH_4	0.05 % Vol CH_4
Oxygen, O_2	0–30 % Vol	0.1 % Vol
Carbon monoxide, CO	0–2000 ppm	1 ppm
CO H_2-Resistant	0–2000 ppm	1 ppm
CO-High Concentration	0–10,000 ppm	5 ppm
Hydrogen sulfide, H_2S	0–200 ppm	1 ppm
H_2S-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	0–10 ppm	0.05 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	0.05 ppm
Hydrogen cyanide, HCN	0–30 ppm	0.5 ppm
Carbon dioxide, CO_2	0–10 % Vol	0.01 % Vol
Butane, C_4H_{10}	0–25 % Vol	0.1 % Vol
Methane, CH_4	0–100 % Vol	1 % Vol
Propane, C_3H_8	0–100 % Vol	1 % Vol
Propane, C_3H_8	0–100 % LEL	1 % LEL
PID – 10.6eV	0–2000 ppm	0.1 ppm

Technical Specifications	
Drop test	3 m
Ingress protection	IP65
Housing	Rugged rubberized armor
Weight	453 g (without belt clip, PID, or IR sensor)
Dimensions (L x W x D)	16.9 x 8.9 x 4.2 cm without belt clip, PID, or IR sensor
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; PID version available with color display only
Backlight	Adjustable time-out
Battery	Rechargeable Li-ION or AA alkaline
Run time	>20 hours run time @ room temperature
Charging time	<= 6 hours
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_2S/NO_2/SO_2 XCell Sensors and IR Sensors; NH_3 and Cl_2 XCell Sensors 2 years, other sensors: 1 year

ALTAIR 5X Multi-Gas Detector with 3-year warranty, data logging, charger, integral pump and tubing	
Configuration	**Part Number**
LEL, O_2, CO, H_2S, 0–10 % CO_2 – colour display	10119611
LEL, O_2, CO, H_2S, NH_3 – colour display	10119632
LEL, O_2, CO, H_2S, SO_2 – colour display	10119616
LEL, O_2, CO, H_2S, PID – colour display	10166730
LEL, O_2, CO, H_2S – monochrome display	10119600

ALTAIR 5X GALAXY GX2 Automated Test System	
1 Cylinder, Charging	10128635
Up to 4 Cylinders, Charging	10128634
1 Cylinder, Non-charging	10128637
Up to 4 Cylinders, Non-charging	10128636
Calibration Gas	
Gas can (58 l) (1.45 % CH_4,15.0 % O_2, 60 ppm CO, 20 ppm H_2S)	10053022
Gas can (58 l) (1.45 % CH_4,15.0 % O_2, 60 ppm CO, 20 ppm H_2S, 2.5 % CO_2)	10102853
Gas can (34 l) (1.45 % CH_4, 60 CO, 20 H_2S, 15 % O_2, 10 SO_2)	10122425
Gas can (34 l) (100 ppm Isobutylene)	10169196

Replacement Sensors			
PID 10.6eV	10165271	XCell SO_2	10106727
XCell LEL	10106722	XCell Cl_2	10106728
XCell O_2	10106729	XCell NH_3	10106726
XCell CO/H_2S Two-Tox	10106725	NO	10114750
XCell CO H_2 RES/H_2S Two-Tox	10121214	NO_2	10080224
XCell CO/H_2S-LC Two-Tox	10121213	ClO_2	10080222
XCell CO/NO_2 Two-Tox	10121217	PH_3	10116638
XCell CO-HC	10121216	HCN	10106375
Accessories			
Leather holster	10099648	USB IR receiver	10082834
Sampling line, 3 m, PU conductive	10103189	Battery pack, alkaline	10114838
Sampling line, 30 m, PU conductive	10159431	Vertical multi-unit charger for four ALTAIR 5X	10127428
Sampling probe, flexible 30 cm	10103191	Carrying case	10152079

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

Approvals

ATEX ⟨Ex⟩ – II 2G Ex db ia mb IIC T4 Gb Ta = –40 °C to +50 °C IP65 Zone 1 (w XCell Ex sensor)
ATEX ⟨Ex⟩ – II 1G Ex ia IIC T4 Ga Ta = –40 °C to +50 °C IP65 Zone 0 (w/o XCell Ex sensor)
ATEX ⟨Ex⟩ – II 2G Ex db e ia mb IIC T4 Gb Ta = –40 °C to +50 °C IP65 (ALTAIR 5X IR)
ATEX ⟨Ex⟩ – II 2G Ex db ia mb IIC T4 Gb Ta = –20 °C to +50 °C IP65 Zone 1 (w XCell Ex sensor) (ALTAIR 5X PID)
ATEX ⟨Ex⟩ – II 1G Ex ia IIC T4 Ga Ta = –20 °C to +50 °C IP65 Zone 0 (w/o XCell Ex sensor) (ALTAIR 5X PID)
ATEX ⟨Ex⟩ – I M1 Ex ia I Ma (ALTAIR 5X & ALTAIR 5X PID)
ATEX ⟨Ex⟩ – I M1 Ex ia I Ma (ALTAIR 5X IR)

EN 50270 Type 2, EN 61000-6-3
MED 2010/68/EU
(not applicable for ALTAIR 5X PID)

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