

# ALTAIR® 5X Multigas Detector

With MSA XCell® Sensor Technology



IT'S WHAT'S  
INSIDE  
THAT COUNTS

Now with  
advanced PID  
for VOC detection

## 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<sub>2</sub>, NO<sub>2</sub>, Cl<sub>2</sub>, and NH<sub>3</sub> 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 two years.**

- Typical life greater than four years for combustible, O<sub>2</sub>, CO/H<sub>2</sub>S, NO<sub>2</sub>, 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 maintain poison-resistance throughout sensor life
- End-of-sensor-life warning gives advanced notice to user, reducing service outages

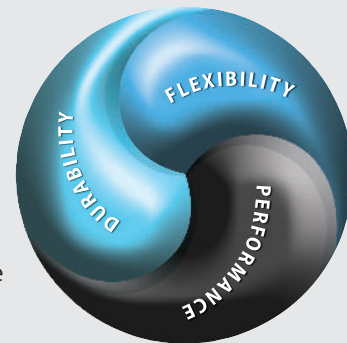
**Three-year back-to-back instrument warranty includes CO/H<sub>2</sub>S/O<sub>2</sub>/LEL/SO<sub>2</sub>, NO<sub>2</sub> XCell and IR sensors**

**Two-year warranty on NH<sub>3</sub> and Cl<sub>2</sub>;  
minimum 12-month warranty on other sensors**

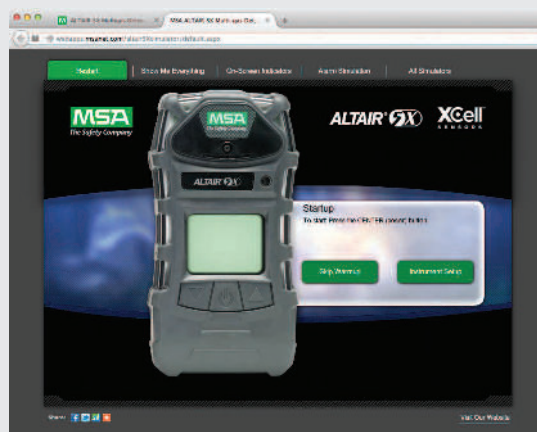
## Count on the ALTAIR 5X Multigas Detector

Exclusive MotionAlert™ and InstantAlert™ features make the ALTAIR 5X Multigas Detector ideal for applications such as confined space monitoring. **MotionAlert** feature 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** feature enables users to manually warn others of potentially hazardous situations.

The ALTAIR 5X Detector is the long-life leader. 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 upon the ALTAIR 5X Detector to withstand the punishment that other portable gas detectors can't.



## Online Training and Product Simulation



MSA's online training and Web content include the ALTAIR 5X Multigas Detector simulator that takes viewers through instrument operation. This tool is found at [www.msasafety.com/altair5x](http://www.msasafety.com/altair5x).

MSA-U® Training Center is a feature-rich online training center that offers specific care and use training for the ALTAIR 5X Detector. Detailed training reports are available for managers, while an end-of-course quiz ensures effective training with feedback on incorrect test answers. Visit [www.MSAafety.com/msau](http://www.MSAafety.com/msau).

\*Three-year warranty is for most common sensor configurations.

# IT'S WHAT'S INSIDE THAT COUNTS

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**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

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The ALTAIR 5X Multigas Detector for LEL, O<sub>2</sub> 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 10-foot drop. Inside, a field-proven integral pump provides consistent gas flow without the concerns 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

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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 of 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 Detector can be equipped with advanced PID options for VOC detection. Our wide variety of IR sensors covers many gases and ranges including CO<sub>2</sub>.

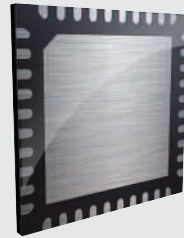
## Flexibility & Connectivity to Meet Your Needs

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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 that up to six gases can be monitored simultaneously.

The ALTAIR 5X Detector 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**<sup>®</sup>  
S E N S O R S



**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.

# 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 option 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 Detector 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 ALTAIR Connect App from Google Play, any compatible Android device becomes an enhanced safety and productivity tool when paired with the ALTAIR 5X Detector.

- 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



## Technical Specifications

Gas type	Range	Resolution
COMBUSTIBLE	0-100% LEL	1% LEL
COMBUSTIBLE	0-5% Vol, CH <sub>4</sub>	0.05% Vol CH <sub>4</sub>
OXYGEN	0-30%Vol	0.1%Vol
CARBON MONOXIDE	0-2000 ppm	1 ppm
CARBON MONOXIDE	0-10,000 ppm	5 ppm
HYDROGEN SULFIDE	0-200 ppm	1 ppm
HYDROGEN SULFIDE - LC	0-100 ppm	0.1 ppm
SULFUR DIOXIDE	0-20 ppm	0.1 ppm
CHLORINE	0-10 ppm	0.05 ppm
AMMONIA	0-100 ppm	1 ppm
NITROGEN DIOXIDE	0-20 ppm	0.1 ppm
NITROGEN DIOXIDE (XCELL)	0-50 ppm	0.1 ppm
CHLORINE DIOXIDE	0-1 ppm	0.01 ppm
PHOSPHINE	0-5 ppm	0.05 ppm
HYDROGEN CYANIDE	0-30 ppm	0.5 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
PID - 10.6EV	0-2000 ppm	0.1 ppm

<b>DROP TEST</b>	10 feet
<b>HOUSING</b>	Rugged rubberized armor
<b>WEIGHT</b>	1 lb (without IR sensor)
<b>DIMENSIONS (L X W X D)</b>	6.69" H x 3.49" W x 1.79" D without belt clip, PID, or IR sensor
<b>AUDIBLE ALARM</b>	>95 dB typical
<b>VISUAL ALARM</b>	2 ultra-bright LEDs, on top
<b>VIBRATING ALARM</b>	Standard
<b>MOTION ALERT &amp; INSTANT ALERT</b>	Standard
<b>DISPLAY</b>	High-contrast monochrome or color display
<b>BACKLIGHT</b>	Adjustable time-out
<b>BATTERY</b>	Rechargeable Li-ION or AA alkaline
<b>RUN TIME</b>	20 hrs @ room temperature
<b>INGRESS PROTECTION</b>	IP65
<b>STANDARD WARRANTY</b>	3 years on CO, H <sub>2</sub> S, LEL, O <sub>2</sub> , SO <sub>2</sub> , and IR sensors 2 years on NH <sub>3</sub> , Cl <sub>2</sub> sensors 1 year on other sensors

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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## Ordering Information

DESCRIPTION	UL P/N	CSA P/N
<b>INSTRUMENT ONLY KITS</b>		
ALTAIR 5X DETECTOR MONO, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S)	10116924	10115118
ALTAIR 5X DETECTOR MONO, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, SO <sub>2</sub> )	10116925	10115119
ALTAIR 5X DETECTOR COLOR, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, PID)	10165445	
<b>STANDARD KITS - MONOCHROME DISPLAY, 10-FT SAMPLING LINE, 1-FT PROBE</b>		
ALTAIR 5X DETECTOR MONO, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S)	10116926	10115120
ALTAIR 5X DETECTOR MONO, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, SO <sub>2</sub> )	10116927	10115141
<b>DELUXE KITS - COLOR DISPLAY, 10-FT SAMPLING LINE, 1-FT PROBE</b>		
ALTAIR 5X DETECTOR COLOR, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S)	10116928	10115142
ALTAIR 5X DETECTOR COLOR, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, SO <sub>2</sub> )	10116929	10115143
ALTAIR 5X DETECTOR COLOR, (LEL, O <sub>2</sub> , CO, H <sub>2</sub> S, PID)	10165446	
<b>ALTAIR 5X GALAXY GX2 AUTOMATED TEST SYSTEM – N. America Configuration</b>		
1 CYLINDER, CHARGING	10128626	
UP TO 4 CYLINDERS, CHARGING	10128625	
1 CYLINDER, NON-CHARGING	10128628	
UP TO 4 CYLINDERS, NON-CHARGING	10128627	
<b>CALIBRATION GAS</b>		
Description	Part No.	
	34 L	58 L
	116L	
1.45% CH <sub>4</sub> , 15% O <sub>2</sub> , 60 PPM CO, 20 PPM H <sub>2</sub> S	10048280	10045035
1.45% CH <sub>4</sub> , 15% O <sub>2</sub> , 60 PPM CO, 20 PPM H <sub>2</sub> S, 10 PPM SO <sub>2</sub>	10098855	10117738
	34 L	58 L
	100L	
100 PPM ISOBUTYLENE	—	—
		494450
<b>SENSOR SPARE PARTS/REPLACEMENTS</b>		
KIT, XCell Ex SENSOR, COMBUSTIBLE	10106722	
KIT, XCell O <sub>2</sub> SENSOR	10106729	
KIT, XCell CO/H <sub>2</sub> S TWO-TOX SENSOR	10106725	
KIT, XCell CO/H <sub>2</sub> S-LC TWO-TOX SENSOR	10121213	
KIT, XCell CO H <sub>2</sub> -RES/H <sub>2</sub> S TWO-TOX SENSOR	10121214	
KIT, XCELL CO-HC SENSOR	10121216	
KIT, XCell NO <sub>2</sub> /CO TWO-TOX SENSOR	10121217	
KIT, REPLACEMENT, HCN	10106375	
KIT, XCell Cl <sub>2</sub> SENSOR REPLACEMENT	10106728	
KIT, REPLACEMENT, ClO <sub>2</sub>	10080222	
KIT, XCell SO <sub>2</sub> SENSOR REPLACEMENT	10106727	
KIT, REPLACEMENT, NO <sub>2</sub>	10080224	
KIT, XCell NH <sub>3</sub> SENSOR REPLACEMENT	10106726	
KIT, REPLACEMENT, PH <sub>3</sub>	10116638	
KIT, REPLACEMENT, NO	10114750	
KIT, REPLACEMENT, PID 10.6EV SENSOR	10165271	
<b>ACCESSORIES</b>		
USB IR RECEIVER	10082834	
BATTERY PACK, ALKALINE	10114837	
<b>CERTIFICATIONS/APPROVALS</b>		
USA	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	
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	