

IT'S WHAT'S INSIDE THAT COUNTS

MSA XCell® Sensor Technology



DURABILITY and PERFORMANCE, OPTIMIZED FOR MINERS



MSA XCell Technology:

Save Time, Save Money, Save Lives

Building on years of design experience, MSA revolutionizes sensor technology with breakthroughs that improve mining application performance:

- Methane-optimized catalytic bead sensor provides increased stability over time
- Sensor response and clear times in less than 15 seconds
- Reduces gas usage for bump testing and calibration
- Greater accuracy and repeatability within changing environmental conditions
- Temperature, humidity and pressure
- Digital sensors offer increased RF (radio frequency) immunity
 - Eliminate false alarms from radios
- Accurate CO readings from 0-2000 ppm
- Industry-first CO/NO₂ combination sensor with wide range and fast response times
- Increased methane sensor poison resistance decreases down time and frequency of sensor replacements
- End-of-sensor life warning gives advanced notice of failing sensors
- Sensor life that greatly exceeds industry average

Technology That's Tough

Lasting Durability

- IP67 ingress protection rating
- Dust-tight
- Water-tight while completely submerged in 3 feet of water for 60 minutes
- Withstands extreme impacts with rugged polycarbonate housing
- Passes 20-ft drop test onto concrete
- Rubberized instrument over-molding acts as an additional armor shield
- Available in standard charcoal color or high-visibility glow-in-the-dark
- Patented catalytic bead support wire protects methane sensor from shock

Life-Saving Performance

- 24-hour compliance tick mark display indication
- Clear visual indication of testing and operational compliance
- Available for up to 4 gases within one small package (CH₄, CO, O₂, H₂S, or NO₂)
- Large back-lit LCD display makes measurement readings easy to see
- Loud 95dB audible horn
- Four bright LED lights on all instrument corners make alarms visible from all directions
- Selectable MotionAlert™ feature uses internal accelerometer to indicate "man down" and sound alarm
- Compatible with MSA Galaxy® Automated Test System for bump testing, calibrating, downloading, and report generation.
- 30+ hour battery run time



New optional glow-in-the dark housing for mining and confined space applications

IT'S WHAT'S INSIDE THAT COUNTS

OUR VISION OF SAFETY 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. To that end, we're proud to offer the advanced technology of the **ALTAIR 4X Multigas Detector with XCell Sensor Technology.**







MSA XCell Sensors are a breakthrough in chemical and mechanical sensor design, enabling faster response and span calibration times

Count on the MSA ALTAIR 4X Multigas Detector The ALTAIR 4X Detector outlasts the competition.

- Patented high-performance XCell Sensors
- Extreme durability
- Water-submersible

| Technical Sp | Technical Specifications | | |
|-----------------|--------------------------|------------|--|
| Gas | Range | Resolution | |
| CH ₄ | 0-5% | 0.05% | |
| O_2 | 0-30% vol | 0.1% vol | |
| CO | 0-1999 ppm | 1 ppm | |
| NO_2 | 0-50 ppm | 0.1 ppm | |
| H₂S | 0-200 ppm | 1 ppm | |

Drop test 20-ft

Housing Rugged rubberized

armor 8.3 oz

Weight 8.3 oz **Dimensions (L x W x D)** 4.4 x 3.0 x 1.37

Audible alarm >95 dB at 1 ft
Visual alarm 4 ultra-bright LEDs

on top and bottom

Vibrating alarm Standard MotionAlert & InstantAlert Standard

Display High-contrast LCD
Backlight Adjustable time-out
Battery Rechargeable

Li ION

Run time 30+ hours

@ room temperature

Charging time < 4 hrs

Operating temperature range $-20^{\circ}\text{C to} + 50^{\circ}\text{C}$ Short Period Operation $-40^{\circ}\text{C to} + 60^{\circ}\text{C}$

Humidity 15 – 90% RH

non-condensing Ingress protection IP67

Data log (adjustable)

(aujustable)

50-hour minimum Standard 500

events

Standard warranty 3 years

Extended warranty Optional 1 year

| ALTAIR 4X Detector with 3-year warranty, data logging, charger, calibration cap, and tubing | | |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------|
| Part Number | Description | Case Color |
| 10125912 | ALTAIR 4X Multigas Detector (CH ₄ , O ₂ , CO) | Charcoal |
| 10125913 | ALTAIR 4X Multigas Detector (CH ₄ , O ₂ , CO) | Phosphorescent |
| 10125914 | ALTAIR 4X Multigas Detector (CH ₄ , O ₂ , CO, NO ₂) | Charcoal |
| 10125915 | ALTAIR 4X Multigas Detector (CH ₄ , O ₂ , CO, NO ₂) | Phosphorescent |

| ALTAIR 4X Galaxy Automated Test System | |
|----------------------------------------|-----------------------------------------------------------------------|
| 10144715 | Basic system (test stand, power supply) |
| 10144716 | Smart system + cylinder holder (basic system, regulator, memory card) |
| 10061219 | GALAXY System end cap |

| Calibration Gas | | |
|-----------------|--------------------------------------------------------------------------------------------------|--|
| 10049056 | Gas cylinder (34 l) 2.5% CH ₄ , 15% O ₂ , 60 ppm CO | |
| 10058172 | Gas cylinder (34 l) 2.5% CH ₄ , 15% O ₂ , 60 ppm CO, 10ppm NO ₂ | |
| 10058171 | Gas cylinder (58 l) 2.5% CH ₄ , 15% O ₂ , 60 ppm CO, 10ppm NO ₂ | |

| Replacement | Replacement sensors | |
|-------------|-------------------------------|--|
| 10121212 | XCell Ex-M Combustible Sensor | |
| 10106729 | XCell O ₂ Sensor | |
| 10106725 | XCell CO/H₂S Two-tox Sensor | |
| 10121217 | XCell CO/NO₂ Two-tox Sensor | |

| Accessories | |
|-------------|------------------------------------|
| 10127422 | 4-unit multi-unit charger NA plug |
| 10143372 | 12-unit multi-unit charger NA plug |



30 CFR Part 22, Methane Detector 30 CFR Part 75 Determination testing for methane and oxygen deficiency

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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