

ALTAIR[®] 4X MINING

IT'S WHAT'S INSIDE
THAT COUNTS

MSA XCell[®]
Sensor Technology



DURABILITY and PERFORMANCE,
OPTIMIZED FOR MINERS

MSA
The Safety Company

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.**



XCell[®]

S E N S O R S



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 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
H ₂ S	0-200 ppm	1 ppm

Drop test	20-ft
Housing	Rugged rubberized armor
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°C to + 50°C
Short Period Operation	-40 °C to + 60 °C
Humidity	15 – 90% RH non-condensing
Ingress protection	IP67
Data log	(adjustable) 50-hour minimum
Event log	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 sensors

10121212	XCell Ex-M Combustible Sensor
10106729	XCell O ₂ Sensor
10106725	XCell CO/H ₂ S Two-tox Sensor
10121217	XCell CO/NO ₂ 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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