Personal Monitoring in Pocket-Size

Altair™ Single-Gas Detector

The Altair Single-Gas Detector features sensor options for carbon monoxide, hydrogen sulfide and oxygen and will operate for over two years maintenance free. This long lifespan, coupled with the unit's high performance, results in one of the most cost-effective single-gas detectors on the market. Advanced design offers superior dust and water protection and high resistance to RFI. Rubberized housing and one-button operation provide the durability and ease of users expect from MSA instruments.

Alarm System

The triple-alarm system featuring two bright flashing LEDs, a piercing audible alarm, and a vibrating alarm ensures that no alarm condition goes unnoticed.

- 95dB audible alarm [distinct sounds for High and Low alarms]
- Dual LEDs positioned to be seen from all angles
- Standard vibrating alarm and standard event logging

Durability Features

- Hard polycarbonate case, encapsulated in a thick rubberized shell
- Extremely resistant to drops and impacts
- Rated to IP67 protection levels for dust/water ingress

Two years or 18 hours of alarm (1080 minutes)

Class 1, Division 1, Groups A, B, C and D ATEX II 2G EEx ia IIC T4 -20°C to +50°C Ex ia IIC T4 -20°C to +50°C

Instrument Type	P/N	1st Alarm	2nd Alarm
Carbon Monoxide (CO)	10070750	25ppm	100ppm
Hydrogen Sulfide (H2S)	10070749	10ppm	15ppm
Oxygen (O2)	10070791	19.5%Vol	23% Vol





Altair™ Pro Single-Gas Detector

The Altair Pro Single-Gas Detector measures and displays concentrations of CO, H2S or O2 (depending on version). This accurate, rugged and reliable detector can be used for gas monitoring or to alert the wearer of hazardous situations. The Altair Pro Single-Gas detector use replaceable sensors and commercially available batteries, and feature a large display with backlight. The standard datalogging records the 50 most recent events.

Class 1, Division 1, Groups A, B, C and D ATEX II 2G EEx ia IIC T4 -20°C to +50°C Ex ia IIC IIC T4 -20°C to +50°C





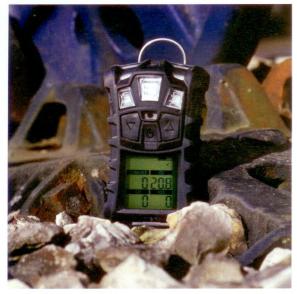


Ordering Information STEL TWA Instrument Type P/N Low Alarm High Alarm 23.00% N/A Oxygen (O2) 10074137 19.50% N/A Carbon Monoxide (CO) 10074135 100ppm 100ppm 25ppm 25ppm Carbon Monoxide (CO) Fire 10076723 25ppm 100ppm 100ppm 25ppm Carbon Monoxide (CO) Steel 10076724 200ppm 75ppm 200ppm 75ppm Hydrogen Sulfide (H2S) 10074136 10ppm 15ppm 15ppm 10ppm Hydrogen Cyanide (HCN) 10076729 4.7ppm 10ppm 10ppm 4.7ppm Chlorine (CL2) 10076716 0.5ppm 1.0ppm 1.0ppm 0.5ppm Chlorine Dioxide (CLO2) 10076717 0.3ppm 0.1ppm 0.1ppm 0.3ppm Sulfur Dioxide (SO2) 10076736 2.0ppm 5.0ppm 5.0ppm 2.0ppm Nitrogen Dioxide (NO2) 10076731 2.0ppm 5.0ppm 5.0ppm 2.0ppm Ammonia (NH3) 10076730 25ppm 50ppm 35ppm 25ppm Phosphine (PH3) 10076735 0.3ppm 1.0ppm 1.0ppm 0.3ppm Oxygen Remote (O2-R) 10076733 19.50% 23.00% N/A N/A

[The toughest kid on the block]







Class 1, Division 1, Groups A, B, C and D ATEX II 2G EEx ia IIC T4 -20°C to +50°C Ex ia IIC T4 -20°C to +50°C



MSA's new ALTAIR 4 Multigas Detector for LEL, CO, H2S, and O2 raises the standard for personal multigas detectors by offering a combination of features you won't find in competitive models.

The ALTAIR 4 Multigas Detector is the only portable gas detector with an optional MotionAlert™ feature if a user should become disabled due to unforeseen hazards. When enabled, the MotionAlert feature will activate if the instrument does not detect motion for 30 seconds, and is ideal for confined space entry applications. This unique gas detector function can be deactivated by the user. This unit's InstantAlert feature also allows users to manually alert others to a potentially hazardous situation. The ALTAIR 4 Multigas Detector is as tough and functional as it looks, offering distinctly ribbed rubber housing for secure grip and unsurpassed durability. A high-contrast display and three large, rubberized buttons enable easy operation in low-light conditions.

The rubber over-molded housing is easy to grip, provides unsurpassed durability, is rated IP67 against dust and water ingress, and passes a 10+ foot drop test. This unit is equipped with a 95+ dB audible alarm and ultra-bright alarm LEDs on both its top and bottom for maximum visibility. Vibrating alarm and data logging are standard features in this very competitively-priced unit. MSA's ALTAIR 4 Multigas Detector is Galaxy® Systemcompatible for calibration and record keeping; a QuickCheck™ Test Station for fast, easy bump testing is also available. Data logging is a standard feature; the ALTAIR 4 Multigas Detector is MSA Link™ Software-ready.

Features & Benefits

- MotionAlert feature plus audible, visual & vibrating alarms
- InstantAlert feature to sound a manual alarm
- Most rugged instrument available
- Large buttons for easy operation
- 16-hour battery run time when fully charged
- Tested to IP67
- Global approvals
- Economically priced
- MSA Link Software-ready

Approval & Standards

Europe: ATEX II 2 G EEx ia d IIC T4, Tamb= -20 to 50° C UL, Class I, Div. 1, Groups A B, C, D, Class II, Div.1 Groups F & G. T4, Tamb= -20 to 50° C

CSA, Class I, Div. 1, Groups A B, C, D

Australian & New Zealand: IEC Ex ia d I/IIC T4, ANZEx ia s I/IIC T4 (Zone 0)

Ordering Information

AL11FU0

Altair 4, O2, CO, H2S, Ex, MotionAleart

Please contact us for other configuration.

[The first portable 5-gas with MotionAlert and InstantAlert features]







Approvals & Standards CE ATEX I 12G EEx ia d IIC T4 -20°C to +50°C UL Class 1, Division 1, ABCDFG CSA C22.2 No. 157 Class I Div. 1 Groups ABCD

The new MSA Altair 5 Multigas Detector raises the bar once again with 5-gas capability, more than 17 preprogrammed languages, high-resolution, crisp color display option, and MSA's exclusive MotionAlert and InstantAlert features. Many great features plus the outstanding durability and performance you expect from

Ideal for confined space applications, the MotionAlert feature, when enabled, activates a "man down" alarm if no motion is detected for 30 seconds. The InstantAlert feature allows users to manually activate an audible alarm to alert those around them to potentially dangerous situations.

Using a portable gas detector should never be a challenge! MSA has designed the Altair 5 Multigas Detector with the same ease-of-use logic to ensure that minimal user training, interaction, or maintenance, is required. The intuitive menu-driven display and 3 large and tactile buttons make operation easy - even while wearing gloves. Numerous customization options are offered to fit many budgets and experience levels, from personal monitoring and pre-entry checks within confined space to industrial hygienist use.

MSA's new generation of miniature catalytic combustion sensors will reliably detect up to 100% LEL of combustible gases, including many solvents. MSA's high-performing electrochemical duo-tox hydrogen sulfide/carbon monoxide sensor allows for an additional sensor slot. Many other toxic sensor choices are available, including ammonia, chlorine, hydrogen cyanide, phosphine, and sulfur dioxide. A lithium-ion rechargeable battery provides enough runtime to cover double shifts.

Features & Benefits

The Altair 5 Multigas Detector is Galaxy® System-compatible for easy calibration and record keeping. Vibrating alarm and datalogging are standard features, and the unit is MSA Link™ Software ready for easy transfer of stored information to a connected PC. The ergonomically designed rubber overmolded housing provides unsurpassed durability, is IP65-rated for dust and water ingress, and passes a 6-foot drop test. The unit is also equipped with a 95+ dB audible alarm and ultra-bright alarm LEDs for maximum visibility.

Features & Benefits

- Logo display screen customization
- MotionAlert and InstantAlert features standard
- MSA Link Software with multi-language capability
- Galaxy Test System-compatible
- Triple alarms at 95 dB+
- Durable rubber/synthetic over-molding
- Intuitive 3-button operation
- Unit passes 6-foot drop test; IP65-rated for water/dust ingress
- Real-time on-line monitoring capability with MSA Link Software
- 2-year comprehensive warranty for standard models

- High-resolution color or monochrome display screen
- Many e-chem sensor options
- Integral pump or diffusion option
- Rechargeable lithium-ion or alkaline battery options
- 17-language display capability

Ordering Information	
ALT5-AL1100G011OU0	Pumped, Ex, O2, H2S, Sampling accessories
ALT5-BL1100G011OU0	Pumped, Color display, Ex, O2, H2S,
	Sampling accessories

[Clarity in Explosive Atmospheres]



TITAN® Combustible Gas Detectors

The TITAN Combustible Gas Detector is a hand-held instrument used for the detection of combustible gases and vapors in air. The unit is equipped with an 85 dB audible alarm and one of the biggest displays available. The intuitive one-button operation allows simplicity of use. Simply switch on, and the Titan warns you of the presence of dangerous levels of combustible gases or vapors. It will stand up to the roughest handling in even the toughest environments. And, it is part of the MSA Stellar series of portable gas detection instruments.

ATEX © II 2G EEx ia d IIC T3/ T4 MED 96/ 98/ EC ® EN 50014-20, EN 50104, EN 61779, EN 50271

Ordering In	formation
10029052	TITAN, NiMH rechargeable battery with vibrating alarm
Leaflet	08-166.2 GB

[Maximum versatility in one hand]





Orion® and Orion® Multigas Detectors

The Orion and Orion Multigas Detectors are low-cost, reliable, and easy-to-use portable instruments for detecting the presence of O², H²S, CO and combustible gas. The Orion Multigas Detector features MSA's long-life 20L combustible sensor; the Orion Multigas Detector features faster response and release times for toluene, xylene and other hydrocarbons. Both instruments will stand up to the roughest handling in even the toughest environments.

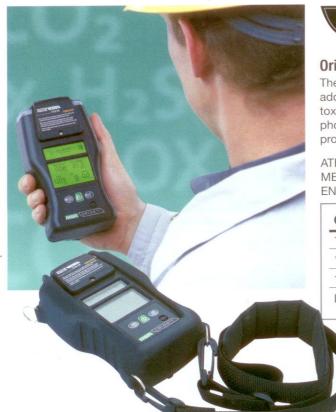
Features:

- One-button calibration
- Long-life battery
- Carbon-filled nylon case
- Tough, durable construction •
- Galaxy compatibility
- · Large, easy-to-read display
- Durable sensors
- Link Software compatibility
- Built-in pump

Class 1, Division 1, Groups A, B, C and D ATEX II 2G EEx ia IIC T4 -20°C to +50°C Ex ia IIC T4 -20°C to +50°C

1111A0P410B000	ORION Pump Ex, Ox, CO, H2S, NiMH
1111A0P410B020	ORION Pump Ex, Ox, CO, H2S, NiMH
	Data logging kit
1111A0P410B110	ORION Pump Ex, Ox, CO, H2S, NiMH
	Calibration kit, Data logging kit
[Please contact us	for the Assemble-to-order options]
Leaflet	0816-27

[Solutions for Your Needs]





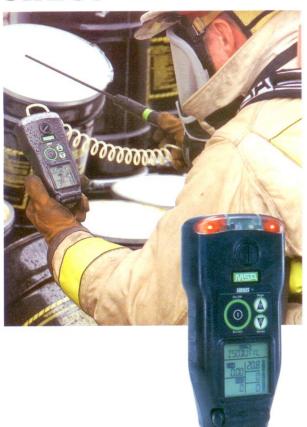
Orion® Plus

The ORION Plus combines all the exceptional features of the ORION with the addition of a class leading choice of toxic and infra-red sensors. The range of toxic sensors available includes ammonia, chlorine, hydrogen cyanide, ozone, phosgene and phosphine among others. Small, handy and reliable, it is probably the most practical and intuitive 5-gas detector on the market today.

ATEX 🕟 II 2G EEx ia d IIC T3/ T4 MED 96/ 98/ EC ® EN 50014-20, EN 50104, EN 61779, EN 50271

10046094	ORION ^{Plus} P, Ex, Ox, Co, H2S, Co2, NiMH
10046095	ORION ^{Plus} P, Ex, Ox, Co, Co2, NiMH
10046096	ORION ^{Plus} P, Ex, Ox, H2S, Co2, NiMH
Leaflet	08-170.2 GB





The SIRIUS PID [Photo Ionization Detector] combines incredible performance, versatility, and ease of use in one instrument. Designed as a versatile PID for measuring volatile organic compounds [VOCs], SIRIUS can be configured with up to four additional sensors: combustible gas, oxygen, carbon monoxide and hydrogen sulphide. Easily operated with one hand, it is an ideal measuring instrument as well as a personal monitor for a wide range of applications.

ATEX © II 2G EEx ib dIIC T3/ T4 MED 96/ 98/ EC EN 50414-20, EN 50104, EN 61779, EN 50271

10051146	SIRIUS, Ex/Ox, H2S, PID, Li-ion
10051144	SIRIUS, Ex/ Ox, H2S, PID, Li-ion, Datalogging,
	Calibration Kit
10051149	SIRIUS, Ex/ Ox, H2S, PID, Li-ion, [Less jacket]
[Please conta	ct us for the Assemble-to-order options]
Leaflet	08-180.2 GB

[Certified and tested for accuracy]



Model RP Calibration Kits

Model RP Check Kits consits of a regulating valve which includes a gauge to measure container pressure, an adapter hose, sensor adapter (where applicable), instructions, and a case fitted with room for two Model RP cylinders of calibration check gas.

.25/ 1.5 LPM FI	ow Control
467895	Model RP Cylinder .25lpm*
467896	Model RP Cylinder 1.5lpm
Gas Miser Dem	and Regulator
710288	Model RP
10034391	Model RP, Chlorine and Ammonia
710289	Model BD-20, with CGA 590 fitting
Model RP Calib	ration Check Kits
477150	Check Kit, Model RP, with 1.5lpm regulator - complete
477149	Check Kit, Model RP, with .25lpm regulator - complete

^{*} Can be used with chlorine and ammonia; replaces P/N 809945



Calibration Cylinders

Part No.	Description
10048890	Methane 2.5%, 15% Oxygen, 60ppm CO, 20ppm H2S
804770	Methane 1.45%, 15% oxygen, 300ppm CO, 10ppm H2S
10050744	Methane 1.45%, 15% oxygen, 300ppm CO, 10ppm H2S,
	2.5% CO2
10045035	Methane 1.45%, 15% Oxygen, 60ppm CO, 20ppm H2S
815704	Isobutylene 100ppm
711014	Methane 100%
814866	Ammonia 25ppm
806740	Chlorine 10ppm
809351	Hydrogen Cyanide 10ppm
808977	Nitrogen Dioxide 10ppm
808978	Sulfur Dioxide 10ppm
711088	Phosphine 0.5ppm



ALTAIR® QuickCheck™ Station

Economical bump test/ alarm check station for ALTAIR and ALTAIR Pro Single-Gas Detectors. Checks intrument's visual, audible and vibrating alarms. Checkmark is placed on intrument display for 24 hours denoting a passed test. Available in automatic and manual versions.

10076705	ALTAIR QuickCheck Station Automatic Version
10076693	ALTAIR QuickCheck Station Manual Version
Leaflet	0803-15-MC

[Galaxy® Automated Test System]



GALAXY® Automated Test System

The multifunctional GALAXY provides simple but intelligent testing and calibration of MSA portable gas detectors, e.g. *SOLARIS*, *SIRIUS* and *ORION*.

This easy-to-use Automated Test Stand offers high performance from a stand-alone unit to a multiunit system linked to a PC. Since all wiring and tubing is pre-connected with in each GALAXY Test Stand and optional cylinder holder [patent pending] the required workspace is kept to a minimum. Once the gas detector is placed in the GALAXY it will be tested, calibrated and/or charged without the touch of a single button. Over 1,000 individual test records can be stored on an industry standard flash card. An optional wired or wireless connection is also available.



Cylinder holder











