



# Instrumentation

Employers are required to comply with OSHA regulations set forth to minimize employees' exposure to hazardous gases and vapors anywhere potentially present. Continuous and comprehensive air monitoring is also mandatory.

Visit [www.osha.gov](http://www.osha.gov) for complete details and regulation requirements.



## ALTAIR® Single-Gas Detectors

Single-gas detection for carbon monoxide, hydrogen sulfide or oxygen that will operate for over 2 years. Offers superior dust/water protection and high resistance to RFI. Rubberized housing and 1-button operation provide durability and ease of use. Features triple alarm system with (2) bright LEDs and audible/vibrating alarms. Automatically records last 25 alarm events. MSA infrared adapter with built-in IR communication port enables user to read data or change alarm set points. Small, thin sensor profile provides high performance in very small package.

ITEM #	ORDER #	DESCRIPTION	UOM
10092521	3085885B1	ALTAIR: H2S, 10 ppm (1st alarm)-15 ppm (2nd alarm)	Ea
◆ 10092522	3085617D1	ALTAIR: CO, 25 ppm (1st alarm)-100 ppm (2nd alarm)	Ea
◆ 10092523	3085157D1	ALTAIR: O2, 19.5% vol. (1st alarm)-23% vol. (2nd alarm)	Ea



## ALTAIR® 2X Gas Detectors

Rugged, intrinsically-safe gas detector is available in (3) models to fit all situations. Features tough over-molded rubber armor that can survive 25' drops onto concrete. Agency certified dust and water IP67 construction.

- ALTAIR 2X single-gas detector incorporates proven XCell® sensor technology and records 150+ hours of periodic data
- ALTAIR 2XP single-gas detector with XCell Pulse Technology features stand-alone bump test anytime, anywhere without specific calibration gas; records 150+ hours of periodic data
- ALTAIR 2XT can monitor (2) gases and records 100+ hours of periodic data



ITEM #	ORDER #	DESCRIPTION	COLOR	UOM
◆ 10153986	308501591	ALTAIR 2X: CO w/ XCell sensor technology	Charcoal	Ea
◆ 10153984	308539841	ALTAIR 2XP: H2S w/ XCell Pulse technology	Charcoal	Ea
◆ 10154040	308500991	ALTAIR 2XT: CO/H2S w/ XCell Two-Tox sensors	Charcoal	Ea
◆ 10154181	308501381	ALTAIR 2XT: CO/H2S w/ XCell Two-Tox sensors	Phosphorescent	Ea



## ALTAIR® 4X Multi-Gas Detectors

Tough, functional detector for LEL, CO, H2S and O2. Rugged, IP67 certified housing provides unsurpassed durability, including ability to survive 20' drop. Easy to operate even in low-light conditions with large, glove-friendly buttons and high-contrast display. Features fast, high-performing sensors, exclusive MSA MotionAlert™ and InstantAlert™ and end-of-sensor-life warning. Sensor response and clear times under 15 seconds. Sixty-second span calibration time. Two-tox CO/H2S sensor with virtually no cross-channel interference. Digital output sensors provide less susceptibility to RF interference. Four-year sensor life with 24-hour run time. Includes quick-start card, datalogging, charger, calibration cap and tubing, and CD manual.

ITEM #	ORDER #	DESCRIPTION	COLOR	UOM
10107602	3085400D1	ALTAIR 4X: LEL, O2, CO & H2S	Charcoal	Ea
◆ 10107603	3085535D1	ALTAIR 4X: LEL, O2, CO & H2S	Phosphorescent	Ea

10107602



## ALTAIR® 5X Multi-Gas Detectors

10116928



Measures up to 6 gases simultaneously and can be fitted with a wide range of both toxic and infrared sensors. Features MSA's XCell™ sensors with extended range covering SO<sub>2</sub>, Cl<sub>2</sub> and NH<sub>3</sub>. Offers superior stability, accuracy, repeatability, fast response and longevity. Standard sensors designed for average life of more than 4 years (more than 3 years for SO<sub>2</sub>, Cl<sub>2</sub>, and NH<sub>3</sub>); allow for faster response/clear times, bump tests in less than 10 seconds, and span calibration time of 60 seconds for common configurations; provide greater signal stability and repeatability under changing or extreme environmental conditions; are plug-and-play-capable. End-of-sensor-life indicator gives advanced warning to user, eliminating service outages. Event/data log records up to 500 events. MotionAlert™ triggers alarm if user remains motionless for 20 seconds. InstantAlert™ allows users to manually activate all alarms to alert others to potential hazards. Includes triple alarm system (visual, audible and vibration), large hi-res LCD screen (color or monochromatic), 24-hour bump test checkmark, rugged rubberized housing and ergonomic design, auto calibration, Li-polymer battery with up to 18 hours usage between charges, 10' sampling line and 1' probe. MSA Link™ software and Galaxy® system compatible. IP65 rated for dust and water ingress.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 10116926	3085842D1	ALTAIR 5X: LEL, O <sub>2</sub> , CO & H <sub>2</sub> S Industrial kit w/ monochrome display, 10' sampling line & 1' probe	Ea
◆ 10116928	3085686D1	ALTAIR 5X: LEL, O <sub>2</sub> , CO & H <sub>2</sub> S Deluxe kit w/ color display, 10' sampling line & 1' probe	Ea



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## Galaxy® GX2 Automated Test Systems

Provides simple, intelligent testing and calibration of ALTAIR 4X and ALTAIR 5X Multi-Gas Detectors. Easy-to-use automated test stand offers high performance as either stand-alone unit or integrated portable detector management system, enabling total data access and control of the MSA ALTAIR family Gas Detector fleet. New MSA Link™ Pro Software for proactive safety management; gas exposure email alerts, direct data input, live filtering, test and exposure queries, collecting and printing reports.

### Features:

- Color touch screen for ease of setup and viewing
- Extremely simple to use; testing starts automatically without touching a single button
- Simultaneous testing of up to ten instruments
- Galaxy GX2 System is optimized for use with MSA's XCell® Sensors; provides up to 50% cost of ownership reduction
- At-a-glance indicators include low calibration gas volume, expiration warnings and test stand status
- MSA Link Pro Software provides proactive safety management, dashboard overview and total record-keeping
- 18 Languages available for test stand and MSA Link Pro Software that simplifies usage and reduces training

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 10128642	30853030	Galaxy GX2 w/ 1 valve for ALTAIR 4/4X	Ea
◆ 10128628	308586291	Galaxy GX2 w/ 1 valve for ALTAIR 5/5X	Ea

◆ Non-stock item. Minimum quantity may apply.



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10048280



### Econo-Cal® Aluminum Calibration Cylinders - Reactive Gases

Aluminum cylinder has 500 psig and contains approximately 34 L at atmospheric pressure. Size: 13 3/4" x 3". Weighs 1 lb., 1 oz.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 711058	30851058	Multi-gas cylinder: CO 300 ppm, O2 15%, Methane 1.45%, H2S 10 ppm, balance N	Ea
◆ 10048280	30858280	Multi-gas cylinder: CO 60 ppm, O2 15%, Pentane 1.45%, H2S 20 ppm, balance N	Ea

Confined Space Products found on Page 234.



### Model RP Aluminum Calibration Cylinders - Reactive Gases

Aluminum cylinder has 500 psig and contains approximately 58 L at atmospheric pressure.

ITEM #	ORDER #	DESCRIPTION	SIZES	UOM
◆ 467897	308551731	Single-gas cylinder: H2S 40 ppm, balance N	58 L	Ea
◆ 804770	30854770	Multi-gas cylinder: CO 300 ppm, O2 15%, Methane 1.45%, H2S 10 ppm, balance N	58 L	Ea
◆ 10045035	308535101	Multi-gas cylinder: CO 60 ppm, O2 15%, Methane 1.45%, H2S 20 ppm, balance N	58 L	Ea



804770



10045035



### Gas Miser® Demand Regulator

Constructed of nickel-plated brass and polished aluminum (especially important for reactive gases). Regulator can supply gas flow from 0.1 lpm to 3.0 lpm. Designed for use with any MSA Model RP Calibration cylinder except chlorine and ammonia and features automatic ON/OFF valve that releases gas only on demand, using only amount of gas needed to calibrate your MSA instrument. When calibration is complete, regulator shuts off automatically. Regulator can stay connected to cylinder where it remains in ready state, making it ideal for fixed installations such as work benches and calibration stations. Eliminates need to change regulators to accommodate different instruments or flow rates. Supplied with calibration tubing and special fitting.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 710288	308586011	Model RP Gas Miser regulator, 0.1-3.0 lpm	Ea



710288



**Model RP Calibration Check Kit**

Kit includes 0.25 lpm regulating valve with gauge to measure container pressure, 30' tubing (without sampling line connection), calibration plug for MSA electrochemical sensors, zero plugs for MSA electrochemical sensors and calibration plug for MSA electrochemical sensors, adapter hose, instructions and case fitted with room for (2) Model RP cylinders of calibration check gas.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 477149	30857149	Calibration check kit	Ea



477149



**When to Bump Test and When to Calibrate**

According to the International Safety Equipment Association (ISEA), "A bump test or full calibration of direct-reading portable gas monitor should be made before each day's use in accordance with manufacturer's instructions, using an appropriate test gas."

If the instrument fails a bump test, it must be adjusted through a full calibration before it is used. The acceptable interval between testing should never exceed 30 days. Only use certified calibration test gases in the proper concentration before the expiration date.

To learn more, visit [www.osha.gov](http://www.osha.gov) or [www.safetysystem.org](http://www.safetysystem.org) for further information on portable gas monitor bump testing and calibration.



467895

**Model RP Fixed Flow Regulator**

Model RP regulator with fixed flow rate of 0.25 lpm. Fixed flow design provides constant and accurate flow to the instrument pump or aspirator. Approved for all MSA calibration gases.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 467895	30857895	Model RP cylinder regulator, 0.25 lpm	Ea



**Honeywell ToxiPro® Single-Gas Detectors**

Compact, rugged in design and fully serviceable with simple 1-button operation. Available sensors: O2, CO, H2S, PH3 and NH3. Three highly-visible, chasing yellow and red alarm LEDs plus vibration. Max, STEL and TWA readings are accessible by pressing the MODE button. Datalogging included. Continuous real-time gas readings. Includes event logger (100 events). Meets IP66/IP67 ingress protection. Compatible with the IQ Express Docking Station. C-UL®-US. Classified for Class I, Div. I, Groups A, B, C and D T4; Class II, Div. I, Groups E, F and G.

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 54-45-01V	C23500011	ToxiPro: CO	Ea
◆ 54-45-02V	C23545041	ToxiPro: H2S	Ea
◆ 54-45-13V	C23545131	ToxiPro: PH3	Ea

ITEM #	ORDER #	DESCRIPTION	UOM
◆ 54-45-21V	C23545221	ToxiPro: NH3	Ea
◆ 54-45-90V	C23545911	ToxiPro: O2	Ea