

# ALTAIR<sup>®</sup> Pro Single-Gas Detector





The ALTAIR Pro Single-Gas Detector has a wide range of features, including simple intuitive operation, small rugged design, and dependable technology that is there when you need it.

These innovative toxic gas and oxygen detectors are based upon the design of the popular ALTAIR Single-Gas Detector, but with added features and functionality.

- ➔ Tough rubberized housing
- ➔ One-button operation
- ➔ Accurately measures the gas concentration or percent oxygen
- ➔ Displays information on a large, clear, backlit LCD.
- ➔ Superior dust and water protection (rated IP67 except O<sub>2</sub>-R)
- ➔ Event-logging and data-logging
- ➔ Excellent impact resistance
- ➔ Versions available for CO, H<sub>2</sub>S, O<sub>2</sub>, NH<sub>3</sub>, Cl<sub>2</sub>, ClO<sub>2</sub>, NO<sub>2</sub>, SO<sub>2</sub>, HCN and PH<sub>3</sub>
- ➔ Great RFI performance
- ➔ Adjustable alarm set points are offered for LOW, HIGH, TWA and STEL
- ➔ Alarms are indicated by flashing LEDs, an audible alarm, and an internal vibrating alarm.
- ➔ Replaceable battery and sensor

The ALTAIR Pro Single-Gas Detector will provide worry-free performance and stand up to the roughest handling in even the toughest industrial environments. The sensors and battery can easily be replaced to keep the unit performing for years.

The ALTAIR Pro Single-Gas Detector is designed and built with MSA's superior quality and is part of the MSA STELLAR® Series, which features a varied selection of single-gas and multigas instruments.



The unique design of the ALTAIR Pro Single-Gas Detector, combined with its highly competitive price, makes it the clear choice when selecting a single-gas instrument. It is accurate, reliable, durable, easy to use, easy to maintain, and packed with features. The ALTAIR Pro Single-Gas Detector is designed and manufactured by MSA, the most trusted name in the safety products industry.

## Ease-of-Use

The ALTAIR Pro Single-Gas Detector is a perfect example of how technology can combine user flexibility and functional simplicity. True single-button operation provides the user with a clear path to any function. With this single button, the user can:

- turn the unit on.
- activate the backlight.
- activate the infrared link for communication with a computer.
- display information about the unit such as software version and alarm settings.
- perform a Fresh Air Setup (FAS).
- initiate a bump test.
- change calibration gas concentration.
- initiate a calibration.
- reset peak reading display.
- manually change LOW, HIGH, TWA, STEL alarm set points (in the protected "Setup" mode only).
- turn the unit off.

Another feature designed for ease of use is the built-in gas delivery adapter; no easy-to-misplace accessories are needed to conduct gas response tests, eliminating any hidden replacement costs.

## Distinctive Alarm System

A triple alarm system leaves no doubt for the user in an alarm situation. The piercing audio alarm is an average of 95 dB @ 1 foot and is designed not to be confused with other workplace sounds. It has an extended frequency range covering a wide sound spectrum. The visual alarm features dual LED displays located on top of the instrument which can be seen from all angles. An internal vibrating alarm also comes standard with all units, emitting a pulse that directly calls additional attention to the user when in alarm mode.

## Easily Replaceable, Commercially Available Battery

The detector runs on a single CR2 camera battery. This battery is simple to install and is commercially available. The installed battery life is approximately 9,000 hrs (> 1 year). A long "wake-up period" each time the unit is activated is avoided by supplying a small amount of power to the sensor even when the unit is turned off.

## Remote Oxygen Detector (O<sub>2</sub>-R)

The remote oxygen version for the ALTAIR Pro Single-Gas Detector is a unique design in the safety industry. This O<sub>2</sub> sensor is attached remotely at the end of a ten-foot cable, rather than inside the instrument's casing. This design allows the user to lower the sensor into a remote location and monitor the O<sub>2</sub> level from ten feet away.

## Sensors

The ALTAIR Pro Single-Gas Detector uses the fast-responding 20 Series oxygen and toxic sensors and meets UL, cUL, ATEX, and Australian standards. The sensors simply plug in to the internal circuit board, making replacement a snap.

## Built-In IR Communication (Event and Data-Logging)

Data-logging is a standard feature on the Altair Pro Single-Gas Detector. It will automatically record the 50 latest events in the session log, while simultaneously recording the peak gas reading or low O<sub>2</sub> reading every three minutes in a periodic data log. Combined, these two tools provide a great way to assess alarm conditions, confirm bump tests or calibration, and verify employee exposure.

To access this data, simply link the unit to your MSA infrared adapter using the standard built-in IR communication. MSA FiveStar® Link® Software allows you to view the various logs, adjust alarm set points, give the unit a specific name, and disable or activate particular features and options. It is a one-stop, easy-to-follow control center for the unit.

## Rugged Design

The thick rubberized housing is designed to withstand accidental drops or other impacts and also provides additional resistance to water ingress. Metal screw inserts offer stability over the unit's lifetime. A durability-proven suspension clip completes this tough outer shell.

## Water and Dust Resistance

The ALTAIR Pro Single-Gas Detector is highly water-and dust-resistant. The simple yet effective design innovatively seals the unit, exceeding the industry-average IP rating.

## Test and Calibration Stations

MSA is proud to offer the ALTAIR QuickCheck™ Station, an easy and cost-effective way to perform daily alarm and gas response tests on your ALTAIR Pro Single-Gas Detectors. The station is available in manual and automatic versions and quickly verifies that the instrument is ready for the upcoming day's use.

MSA also offers the ALTAIR Galaxy® Automated Test System for complete automatic calibration and record-keeping of your ALTAIR Pro Single-Gas Detectors. Please contact MSA for additional information on either of these stations.



## ALTAIR® Pro Single-Gas Detector Specifications

<b>Weight</b>	4.0 oz including clip
<b>Dimensions</b>	3.4" x 2.0" x 1.0"
<b>Operating T range</b>	-20 to +50°C (-4 to +122°F)
<b>Humidity</b>	10-95% RH non-condensing

Gases and measuring ranges		
Gas	Range	Resolution
Oxygen	0-25% by vol	0.1 Vol. %
Carbon Monoxide	0-1500 ppm	1 ppm
Hydrogen Sulfide	0-200 ppm	1 ppm
Hydrogen Cyanide	0-30 ppm	0.5 ppm
Chlorine	0-20 ppm	0.1 ppm
Chlorine Dioxide	0-1.00 ppm	0.02 ppm
Sulfur Dioxide	0-20 ppm	0.1 ppm
Nitrogen Dioxide	0-20 ppm	0.1 ppm
Ammonia	0-100 ppm	1 ppm
Phosphine	0-5.00 ppm	0.05 ppm
Remote Oxygen (O2-R)	0-25% by vol	0.1 Vol. %

<b>Alarms</b>	Average > 95 dB @ 1 ft, bright LEDs, vibrating alarm standard
<b>Warranty</b>	See instruction manual for full warranty information
<b>Instrument life</b>	Indefinite with sensor and battery replacements as needed
<b>Battery</b>	CR2 lithium camera battery (9000 hour installed life - typical)
<b>Case</b>	Polycarbonate with rubberized shell
<b>Display</b>	Large LCD with backlight
<b>Ingress Protection</b>	IP67 (except O2-R is IP54)
<b>Data Logging</b>	50 latest events in session log Peak value every 3 min in periodic log
<b>Certifications</b>	
<b>US and Canada</b>	Class 1, Division 1, Groups A, B, C and D
<b>Europe</b>	ATEX II 2G EEx ia IIC T4 -20°C to +50°C
<b>Australia</b>	Ex ia IIC IIC T4 -20°C to +50°C

Instrument Type	P/N	Low Alarm	High Alarm	STEL	TWA
Oxygen (O2)	10074137	19.50%	23.00%	N/A	N/A
Carbon Monoxide (CO)	10074135	25 ppm	100 ppm	100 ppm	25 ppm
Carbon Monoxide (CO) Fire	10076723	25 ppm	100 ppm	100 ppm	25 ppm
Carbon Monoxide (CO) Steel	10076724	75 ppm	200 ppm	200 ppm	75 ppm
Hydrogen Sulfide (H2S)	10074136	10 ppm	15 ppm	15 ppm	10 ppm
Hydrogen Cyanide (HCN)	10076729	4.7 ppm	10 ppm	10 ppm	4.7 ppm
Chlorine (CL2)	10076716	0.5 ppm	1.0 ppm	1.0 ppm	0.5 ppm
Chlorine Dioxide (CLO2)	10076717	0.1 ppm	0.3 ppm	0.3 ppm	0.1 ppm
Sulfur Dioxide (SO2)	10076736	2.0 ppm	5.0 ppm	5.0 ppm	2.0 ppm
Nitrogen Dioxide (NO2)	10076731	2.0 ppm	5.0 ppm	5.0 ppm	2.0 ppm
Ammonia (NH3)	10076730	25 ppm	50 ppm	35 ppm	25 ppm
Phosphine (PH3)	10076735	0.3 ppm	1.0 ppm	1.0 ppm	0.3 ppm
Oxygen Remote(O2-R)	10076733	19.50%	23.00%	N/A	N/A
Alternate Set Point Models	P/N	Low Alarm	High Alarm	STEL	TWA
Oxygen (O2)	10076732	18.00%	19.50%	N/A	N/A
Carbon Monoxide (CO)	10076718	30 ppm	60 ppm	60 ppm	30 ppm
Carbon Monoxide (CO)	10076719	35 ppm	100 ppm	100 ppm	35 ppm
Carbon Monoxide (CO)	10076720	35 ppm	400 ppm	400 ppm	35 ppm
Carbon Monoxide (CO)	10076721	50 ppm	200 ppm	200 ppm	50 ppm
Carbon Monoxide (CO)	10076722	100 ppm	300 ppm	300 ppm	100 ppm
Carbon Monoxide (CO) Steel	10080532	199 ppm	200 ppm	200 ppm	35 ppm
Hydrogen Sulfide (H2S)	10076728	10 ppm	20 ppm	20 ppm	10 ppm
Hydrogen Sulfide (H2S)	10076725	5 ppm	10 ppm	10 ppm	5 ppm
Hydrogen Sulfide (H2S)	10076727	8 ppm	12 ppm	12 ppm	8 ppm
Hydrogen Sulfide (H2S)	10076726	7 ppm	14 ppm	14 ppm	7 ppm

## Accessories and Parts

Part Number	Description
467895	Regulator, 0.25 lpm
10030325	Tubing, 16" (do not use with NH3, Cl2, and CLO2)
10080534	Tubing, 16" Tygon-lined (NH3, Cl2, and CLO2)
10074132	3V CR2 battery
10069894	Clip, stainless steel

Part Number	Description
10041105	Cellphone clip
10041107	Lanyard clip
10073346	Hardhat clip
10040002	Clip, suspender (standard)
710946	FiveStar Link with IR

**Note:** The ALTAIR QuickCheck™ Station and ALTAIR Galaxy Automated Test System are available for bump testing and calibration of most versions of the ALTAIR and ALTAIR Pro Single-Gas Detector family.

**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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