# ALTAIR® 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.

Innovative toxic gas and oxygen detectors are based upon ALTAIR Single-Gas Detector design, but with added features and functionality.

- Tough rubberized housing
- One-button operation
- Accurately measures gas concentration or percent oxygen
- Displays information on a large, clear, backlit LCD.
- Superior dust and water protection (rated IP67 except for O2-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, audible alarm and internal vibrating alarm
- Replaceable battery and sensor

ALTAIR Pro Single-Gas Detectors provide worry-free performance, standing up to the roughest handling in tough industrial environments. Easily replaced sensors and battery keep detectors performing for years. ALTAIR Pro Single-Gas Detector's unique design and competitive price makes it the clear choice when selecting a single-gas detection instrument. It is accurate, reliable, durable, easy to use, easy to maintain, and packed with features.

#### Ease of use

The ALTAIR Pro Single-Gas Detector combines user flexibility and functional simplicity. True single-button operation provides users with a clear path to any function. With a single button, users can:

- Turn the unit on.
- Activate the backlight.
- Activate the infrared link for computer communication.
- Display software version and alarm settings.
- Perform fresh air setup (FAS).
- Initiate a bump test.
- Change calibration gas concentration.
- Initiate calibration.
- Reset peak reading display.
- Manually change LOW, HIGH, TWA, STEL alarm set points (in protected SETUP mode only).
- Turn the unit off.

#### Packed with features

- Built-in gas delivery adapter; no accessories are needed for gas response tests.
- Distinctive triple alarm system leaves no doubt for users in alarm situations.
- Piercing audio alarm averages 95 dB @ 1 foot and is distinctive from other workplace sounds..
- Extended frequency range covers a wide sound spectrum.
- Visual alarm features dual LED displays located on the unit's top, visible from all angles.
- Internal vibrating alarm is standard, emitting a pulse that directly calls additional attention when in alarm mode.



# Easily Replaceable, Commercially Available Battery

The detector runs on a single, simple-to-install CR2 camera battery. Installed battery life is approximately 9,000 hrs (> 1 year). No long wake-up period; each time units are activated, small amounts of power are supplied to sensors even when units are powered off.

# Remote Oxygen Detector (O2-R)

Remote oxygen version attaches remotely to the end of a 10-foot cable, rather than inside instrument housing. Users lower sensor into remote locations and monitor  $O_2$  levels from 10 feet away.

#### Sensors

ALTAIR Pro Single-Gas Detectors use fast-responding 20 Series oxygen and toxic sensors, meeting UL, cUL, ATEX, and Australian standards. Sensors simply plug into internal circuit board for fast, easy replacement.

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

Data logging is standard; unit automatically records 50 latest events in the session log, while simultaneously recording peak gas readings or low O2 readings every three minutes in a periodic data log. Combined, these tools provide a great way to assess alarm conditions, confirm bump tests or calibration and verify employee gas concentration exposures. To access data, simply link the unit to your MSA infrared adapter using standard built-in IR communication. MSA FiveStar® Link™ Software lets you view various logs, adjust alarm set points, assign specific names to units, and disable or activate particular features and options.

## **Rugged Design**

Thick rubberized housing withstands accidental drops or other impacts and provides additional water ingress resistance. Metal screw inserts offer stability over the unit's lifetime. Durable suspension clip completes this tough outer shell.

#### **Water and Dust Resistance**

ALTAIR Pro Single-Gas Detectors are highly water- and dust-resistant; sealed units exceed industry average IP rating.

# **Test and Calibration Stations**

MSA offers the ALTAIR GALAXY® GX2 Automated Test System for complete automatic calibration and record-keeping of your ALTAIR Pro Single-Gas Detectors. MSA's ALTAIR QuickCheck® Station is 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 instruments are ready for the upcoming day's use.





# ALTAIR Pro Single-Gas Detector Specifications

WEIGHT	4.0 oz including clip			
DIMENSIONS	3.4" x 2.0" x 1.0"			
OPERATING T RANGE	-20°C to +50°C (-4 to +122°F)			
HUMIDITY	10-95% RH non-condensing			
WARRANTY	See instruction manual for full warranty information			
INSTRUMENT LIFE	Indefinite with sensor and battery replacement as needed			
BATTERY	CR2 lithium camera battery (9000 hour installed life - typical)			
CASE	Polycarbonate with rubberized shell			
DISPLAY	Large LCD with backlight			
HUMIDITY	10-95% RH non-condensing			
INGRESS PROTECTION	IP67 (except O2-R is IP54)			
DATA LOGGING	50 latest events in session log. Peak value every 3 minutes in periodic log.			
CERTIFICATIONS: US AND CANADA				
EUROPE	Ex ia IIC T4			
USA	AEx ia IIC T4			
EUROPEAN UNION	ATEX II 2G Ex ia IIC T4			
AUSTRALIA	Ex ia IIC T4 (Ta = $50^{\circ}$ C)			

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	
PHOSPINE	0-5.00 ppm	0.05 ppm	
REMOTE OXYGEN (O2-R)	0-25% by vol	0.1Vol%	
ALARMS	Average > 95 dB @ 1 ft, bright LEDs, vibrating alarm standard		

INSTRUMENT TYPE	P/N	Low Alarm	High Alarm	STEL	TWA
OXYGEN (O <sub>2</sub> )	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	200 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 (CLO <sub>2</sub> )	10076716	0.5 ppm	1.0 ppm	1.0 ppm	0.5 ppm
CHLORINE DIOXIDE (CLO <sub>2</sub> )	10076717	0.1 ppm	0.3 ppm	0.3 ppm	0.1 ppm
SULFUR DIOXIDE (SO <sub>2</sub> )	10076736	2.0 ppm	5.0 ppm	5.0 ppm	2.0 ppm
NITROGEN DIOXIDE (SO <sub>2</sub> )	10076731	2.0 ppm	5.0 ppm	5.0 ppm	2.0 ppm
AMMONIA (NH <sub>3</sub> )	10076730	25 ppm	50 ppm	35 ppm	25 ppm
PHOSPINE (PH <sub>3</sub> )	10076735	0.3 ppm	1.0 ppm	1.0 ppm	7 ppm
OXYGEN REMOTE (OR-2)	10076733	19.50%	23.00%	N/A	N/A
ALTERNATE SET POINT MODELS	P/N	Low Alarm	High Alarm	STEL	TWA
OXYGEN (O <sub>2</sub> )	10076732	19.50%	18.00%	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	300 ppm	35 ppm
HYDROGEN SULFIDE (H₂S)	10076728	10 ppm	20 ppm	10 ppm	10 ppm
HYDROGEN SULFIDE (H₂S)	10076725	5 ppm	10 ppm	10 ppm	5 ppm
HYDROGEN SULFIDE (H <sub>2</sub> S)	10076727	8 ppm	12 ppm	12 ppm	8 ppm
HYDROGEN SULFIDE (H₂S)	10076726	7 pm	14 ppm	14 ppm	7 ppm

ACCESSORIES AND PARTS			
P/N	Description		
467895	Regulator, 0.25 lpm		
10030325	Tubing, 16" (do not use with NH <sub>3</sub> , Cl <sub>2</sub> , CLO <sub>2</sub> )		
10080534	Tubing, 16" Tygon-lined (NH <sub>3</sub> , Cl <sub>2</sub> , CLO <sub>2</sub> )		
10074132	3V CR2 battery		
10069894	Clip, stainless steel		
10041105	Cellphone clip		
10041107	Lanyard clip		
10073346	Hardhat clip		
10040002	Clip, suspender (standard)		
10088099	MSA Link Software CD		
10082834	IR adaptor for USB		

**Note:** The ALTAIR QuickCheck Station and ALTAIR GALAXY GX2 Automated Test System are available for bump testing and calibration of most versions of ALTAIR and ALTAIR Pro Single-Gas Detectors.

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.

