RAM 4021 Autocal®

Continuous Respirable Air Monitor



RAM 4021

Airline Monitor

- Continuous Carbon monoxide (CO) monitor for compressed air
- Robust, easy to operate design
- Integrated dew point measurement (if specified)
- Meets OSHA monitoring requirements for grade D breathing air
- AutoCal® automatic calibration
- Available in CE marked models
- Dryer control relays (DPX model only)
- User-adjustable alarm points
- Dry contacts for remote horn and lights
- Internal, case-mounted horn
- LCD display
- NEMA 4X housing
- Three-stage filtering option for up to 8 users

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RAM 4021

The RAM 4021 AutoCal® series is the unit of choice where specific and accurate measurement of carbon monoxide, oxygen or dew-point levels are required. Designed to meet OSHA requirements for monitoring of Grade D respirable air, this unit is equipped with a reliable electrochemical sensor that accurately indicates the level of carbon monoxide on an illuminated liquid crystal display. Adding versatility, this unit offers optional oxygen or dew point sensors for applications where detection or measurement is needed.

Calibration and maintenance are simple with our innovative AutoCal® system. Additional features including alarm relay contacts, user adjustable alarm points, low flow alarm indicator and many more, make this unit an intelligent choice. The RAM 4021 is available in six models, the 4021 (CO), 4021-1 (CO and O_2), 4021-O (O2), 4021-DP (dew point), 4021-DPX (CO and dew point levels) and 4021-PR (CO and additional relay to signal power loss to monitor, complies with newest NFPA regulation). All models may be purchased with or without airline filter systems.

Respiratory air specifications

All GfG Instrumentation RAM Instruments satisfy the requirements of OSHA rule 29 CFR 1910.134 (d) (2) (ii) for carbon monoxide monitoring. They will also monitor Grade E air, generally specified for breathing air in cylinders (SCBA).

OSHA Regulations (Standard - 29 CFR)
Respiratory Protection - 1910.134

(i) (6)
For compressors that are not oil-lubricated, the employer shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.

(i) (7)
For oil-lubricated compressors, the employer shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.



Wall mounted filter panel option

8025 (25 CFM), 8050 (50 CFM), and 8100 (100 CFM)

The 25, 50 and 100 CFM panels filter out dangerous toxins from supplied air sources and ensure clean, breathable air. The three-stage filter system efficiently removes particulates, oil vapors and hydrocarbons from an air supply. After filtration, the regulator sets the pressure for the respiratory equipment and the manifold assembly provides multiple outlets for airline hose quick connections. The model 8025 panel includes two user female quick connect outlets; the 8050 includes four, and the 8100 includes eight. A 1/2" NPT connection is standard on all 50 and 100 CFM panels, and a 3/8" NPT connection is standard on all 25 CFM panels.

Specifications

Ranges and Resolution for Sensors

Carbon monoxide (CO)	0	- 100	ppm	1	ppm
Oxygen (O_2)	0	- 25	% vol	0.1	%/vol
Dewpoint (DPX)	-112	- 68	°F	1	°F

Expected Sensor Life

Carbon monoxide (CO)	Greater than 2 years
Oxygen (O_2)	Greater than 2 years
Dew point	Greater than 2 years

Detection Principles (sensor)

CO specific	Electrochemical cell
Oxygen	Electrochemical cell
Dewpoint (DPX)	Thin film technology

Other Specification

Dimensions:	7.3x5.9x4 inches (185x150x101 mm)
Weight:	5 pounds (226 kg)
Power:	110 VAC or 12 VDC - 24 VDC
Alarms:	Audible: Case mounted horn Visual: LEDs Relays: Two dry contacts
Housing:	NEMA 4X

Temperature range: +32 to +105°F (0 to +40°C)
Air temperature: +32 to +122°F (0 to +50°C)
Adjustable alarm points: From 1 ppm to 70 ppm
Factory Set to: CO 5 ppm (warning) & 10 ppm (alarm)
O_2 19.5% and 23.5% volume
Dew point 4°F
Sample flow rate: 0.8 cubic feet of air per hour (scfh)

Filter panels:	8025 25 CFM panel (2 ports) 8050 50 CFM panel (4 ports) 8100 100 CFM panel (8 ports)

Airline Input

1/8" feed	Standard pressure 30 to 145 psi
1/2" NPT	50 to 100 CFM panels (wall mount)
3/8"	25 CFM panels (wall mount)

Available Relay Contacts and Ratings

1 alarm (red) NO/NC
1 warning (yellow) NO/NC
1 power loss NO/NC (4021-PR only)

Available Models

4021	Carbon monoxide
4021-1	Carbon monoxide and oxygen
4021-O	Oxygen
4021-DP	Dew point
4021-DPX	Carbon monoxide and dew point
4021-PR	Carbon monoxide (complies with NFPA '99 C-*26 (5.1.3.5-15))

Warranty

Limited lifetime on instrument and electronics. One year on CO, O_2, and Dew point sensors.

Refer to GfG complete warranty for details

Specifications subject to change without notification

Distributed by:

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