

ProAir 2200

Gas Monitor for Process Compressed Air Lines

Available for monitoring VOCs, dew point, oxygen, H₂, CO₂, CO and other toxic gases

ProAir 2200 is a microprocessor-based monitor especially designed for use in industrial, aerospace, medical and pharmaceutical applications. It can continuously and simultaneously monitor up to 4 gas conditions. The system can be custom configured to monitor a variety of conditions, including: VOCs, dew point, oxygen and a number of other gases. The instrument has a user-friendly interface for all maintenance and operation functions, and it is protected by a compact and durable enclosure for process environments.



FEATURES

- Many Instrument Configuration Options Available for VOCs, Dew Point, Oxygen, H₂, CO₂, CO, and many Other Toxic Gases
- Designed for Monitoring Compressed Air Lines
- Monitors Up to 4 Gases with a Combination of Internal Sensors
- Designed for use in Industrial, Aerospace, Medical and Pharmaceutical Applications
- Adjustable Alarm Points
- Programmable Relay Contacts
- Large Easy-to-Read Display
- RS-232/RS-485 Modbus Communication
- 4-20 mA Outputs
- VOCs and Dew Point Monitoring in One Package
- Classified to UL 60601-1 IEC 60601-1 & CSA 22.2, No. 601.1

TABLE 1 SENSOR SPECIFICATIONS

Gas (1)	Sensor Type (1)	Typical Range (2)	Display Resolution	Example (3) Low, High (4) Alarm Point LEDs	Relay (5) Alarm Points	Life (6)	Temp °C (7)	Response Time t ₉₀	Optional Range (2)	Optional Display Resolution
VOCs	PID	0-100 ppm	0.1 ppm	10, 20 ppm	↑ Specify When Ordering User Programmable ↓	60	0° to 40°	30 sec	0-2000 ppm	1 ppm
Dew Point	TFP	-112° to 68°F	1°F	-40°, +39°F		60	0° to 25°	10 sec	-----	-----
N ₂ O	IR	0-2000 ppm	20 ppm	100, 500 ppm		60	-10° to +50°	30 sec	-----	-----
HC	IR	0-100% LEL	1% LEL (8)	10, 20% LEL		60	-10° to +50°	30 sec	0-100% by Vol (8)	1% by Vol
HC/VOCs	MOS	0-500 ppm	1 ppm	100, 200 ppm		48	-10° to +50°	180 sec	0-100% LEL (8)	1% LEL
CO ₂	IR	0-5000 ppm	10 ppm	1000, 2000 ppm		60	-10° to +40°	30 sec	0-100% by Vol (8)	1% by Vol
O ₂	EC	0-30% by Vol	0.1% by Vol	19.5%, 23.5% by Vol		18	-10° to +40°	15 sec	0-100% by Vol	1% by Vol
CO	EC	0-500 ppm	1 ppm	50, 200 ppm		30	-10° to +40°	30 sec	0-1000 ppm	1 ppm
NH ₃	EC	0-100 ppm	1 ppm	25, 75 ppm		24	-10° to +40°	60 sec	0-1000 ppm	1 ppm
SO ₂	EC	0-30 ppm	0.1 ppm	2, 10 ppm		30	-10° to +40°	35 sec	-----	-----
H ₂	EC	0-2000 ppm	1 ppm	200, 1000 ppm		30	-10° to +40°	60 sec	0-4% by Vol (8)	0.01% by Vol
H ₂ S	EC	0-100 ppm	1 ppm	10, 50 ppm		30	-10° to +40°	30 sec	0-30 ppm	0.1 ppm
NO	EC	0-100 ppm	1 ppm	25, 75 ppm		30	-10° to +40°	20 sec	-----	-----
NO ₂	EC	0-30 ppm	0.1 ppm	3, 10 ppm		30	-10° to +40°	30 sec	-----	-----
ETO	EC	0-10 ppm	0.1 ppm	3, 9 ppm		24	-10° to +40°	120 sec	-----	-----

NOTES FOR TABLE 1:

- (1) See TABLE 2 for nomenclature, symbols and abbreviations used.
- (2) Examples of typical ranges. Other ranges may be available on request.
- (3) Examples of typical alarm points. Other alarm points available on request.
- (4) High and Low alarm points are user programmable.
- (5) See TABLE 3 for gas alarm relay programmable configurations.
- (6) Typical sensor life in months.
- (7) Maximum temperature range in degrees C.
- (8) Internal sensors are not intrinsically safe or explosionproof.

TABLE 2

GAS/GAS GROUP

Volatile Organic Compounds (VOCs)
Dew Point (DP)
Nitrous oxide (N₂O)
Hydrocarbons (HC)
Organic solvents (VOCs/HC)
Carbon dioxide (CO₂)
Inorganics (O₂, CO, etc.)
Ethylene oxide (ETO)

SENSOR TYPE

Photoionization Detector (PID)
Thin-film polymer (TFP)
Non-dispersive infrared (NDIR, IR)
Non-dispersive infrared (NDIR, IR)
Metal oxide semiconductor (MOS)
Non-dispersive infrared (NDIR, IR)
Electrochemical (EC) cell
Electrochemical (EC) cell



ProAir 2200 Monitor for Compressed Air Lines

GENERAL SPECIFICATIONS

Display: 2 line, 16 character, dot matrix LCD

Alarms: Visual: LEDs, Audible: piezo electric

Horn: 95 dB at 2 feet

Alarm Relays: 5 programmable gas relays plus fault. All relays are programmable latching or non-latching, dry SPDT, 10 amps (resistive load only) at 110 VAC.

Operating Power: 100 to 240 VAC and/or 12 VDC, 15 Watts

Inlet Pressure, for internal sensors: Must be regulated to 55 psi (user provided)

Flow Rate, for internal sensors: 1 liter per minute (2 SCFH)

Enclosure: Thermoplastic box with clear, hinged front cover, designed for NEMA 12 and 4X

Size: 10.5"H x 8.5"W x 5.8"D

Weight: 8 lbs.

NOTE: Loss of primary power renders continuous gas monitors inoperative. Contact factory for specifications and pricing for backup battery systems compatible with ENMET monitors.

TABLE 3 PROGRAMMABLE ALARM RELAYS

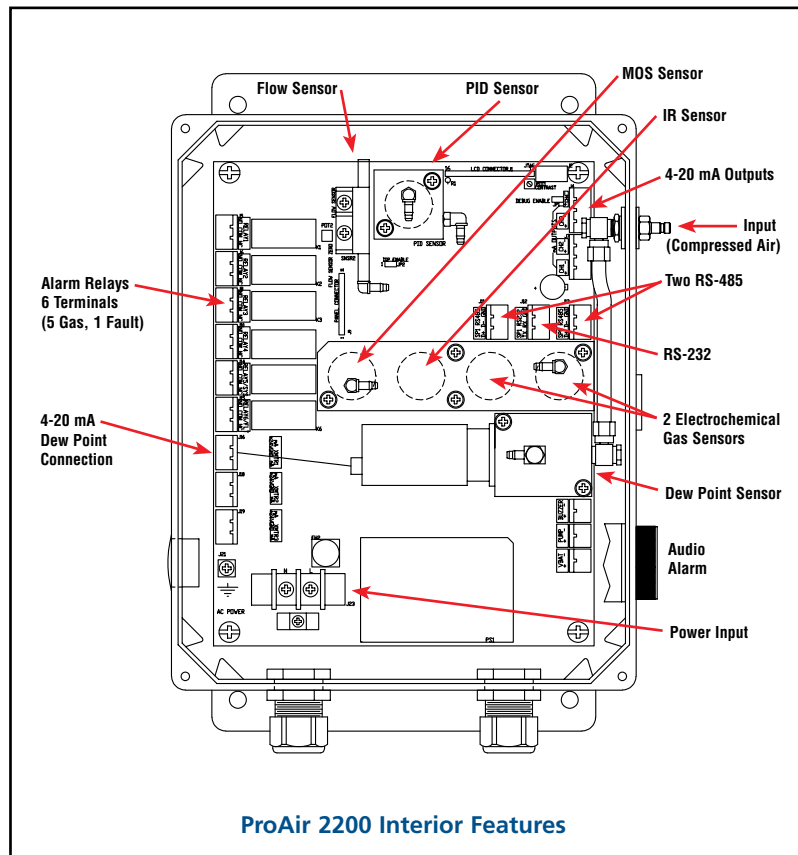
ProAir 2200 has 5 gas alarm relays and 1 fault relay. The gas alarm relays are completely user programmable. The instrument has the potential of a maximum of 4 sensors (channels), with 2 alarms (Low, High) per channel.

TYPICAL 4-CHANNEL

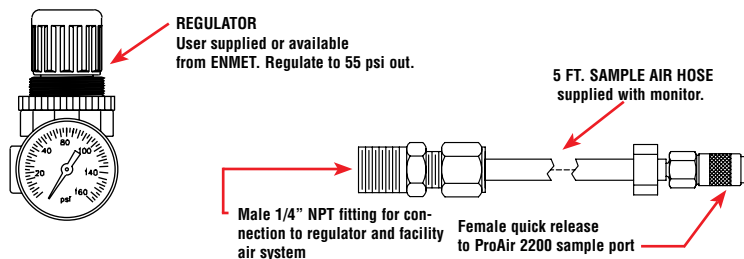
CH 1 ALARM 1 RELAY 1
CH 2 ALARM 1 RELAY 2
CH 3 ALARM 1 RELAY 3
CH 4 ALARM 1 RELAY 4
CH 1-4 ALARM 2 RELAY 5

TYPICAL 2-CHANNEL

CH 1 ALARM 1 RELAY 1
CH 1 ALARM 2 RELAY 2
CH 2 ALARM 1 RELAY 3
CH 2 ALARM 2 RELAY 4
CH 1-2 ALARM 2 RELAY 5



ProAir 2200 Interior Features



Hardware for Compressed Air Line Monitoring

ORDERING INFORMATION

See Price List

NOTE: Contact ENMET for information on our Model GSM-60, MedAir 2200, ISA-300RAL and related products.

