

580 SERIES DUAL OXYGEN/CARBON DIOXIDE MONITOR



The 580 Series Dual Oxygen/Carbon Dioxide Monitor provides continuous and reliable measuring of oxygen and carbon dioxide in confined spaces. Equipped with a non-depleting zirconium oxide sensor cell and a non-dispersive infrared (NDIR) CO₂ sensor cell, the monitor can sample oxygen and carbon dioxide levels up to 100 feet away. Once installed, it requires no calibration or monthly maintenance and never drifts or loses sensitivity, even when weather, humidity, or temperature changes. Designed for facilities that use carbon dioxide, nitrogen, helium, argon, and other inert gases, the 580 Series Dual Oxygen/Carbon Dioxide Monitor can function as a stand-alone gas detector or linked to optional CONCOA single or multi-point controllers, integrated with a variety of CONCOA pressure and flow controls for emergency shut-off, or connected to an existing centralized monitoring system.



580 3007 shown

Typical Applications

- Bioreactors
- Laboratories with Incubators
- Control Rate Freezers
- Environmental Chambers
- Atmospheric Fertilization
- Laboratory or Industrial Gas Storage and Use Areas

Features

Non-depleting Zirconium Oxide Sensor Cell detects low oxygen levels without reference gas

Self-calibrating NDIR CO₂ Sensor Cell adjusts to ambient every 180 hours

No Calibration O₂ Sensor requires no scheduled maintenance (periodic span adjustment as needed)

Non-latching Audible Alarm resets automatically when the alarm condition clears

Two Adjustable Alarm Setpoints allow the user to configure alarm threshold polarity

Smart Electronics monitor sensor operation continuously and alerts user to sensor faults

NDIR CO₂ Sensor and Long Lasting O₂ Zirconium Sensor provides 10+ years of operation under normal conditions with minimum maintenance

Materials and Specifications

Gas Detected: Oxygen and carbon dioxide

Response Time: Within one second of any change in oxygen or carbon dioxide levels

Range: 0-25% (oxygen); 0-10,000 ppm (carbon dioxide)

Accuracy: ±1% of full range (oxygen); ±3% of measured value (carbon dioxide)

Operating Temperature: -40°F to 140°F (-40°C to 60°C) oxygen; 32°F to 122°F (0°C to 50°C) carbon dioxide

Sensor Type: Zirconium oxide (oxygen); Non-dispersive infrared (carbon dioxide)

Relay Outputs: Two user-settable alarm relays and one fault relay rated 2A @ ≤ 24 VAC

Power Requirement: 24 VDC (250mA)

Display: 3/4 in LCD digital display, back lit

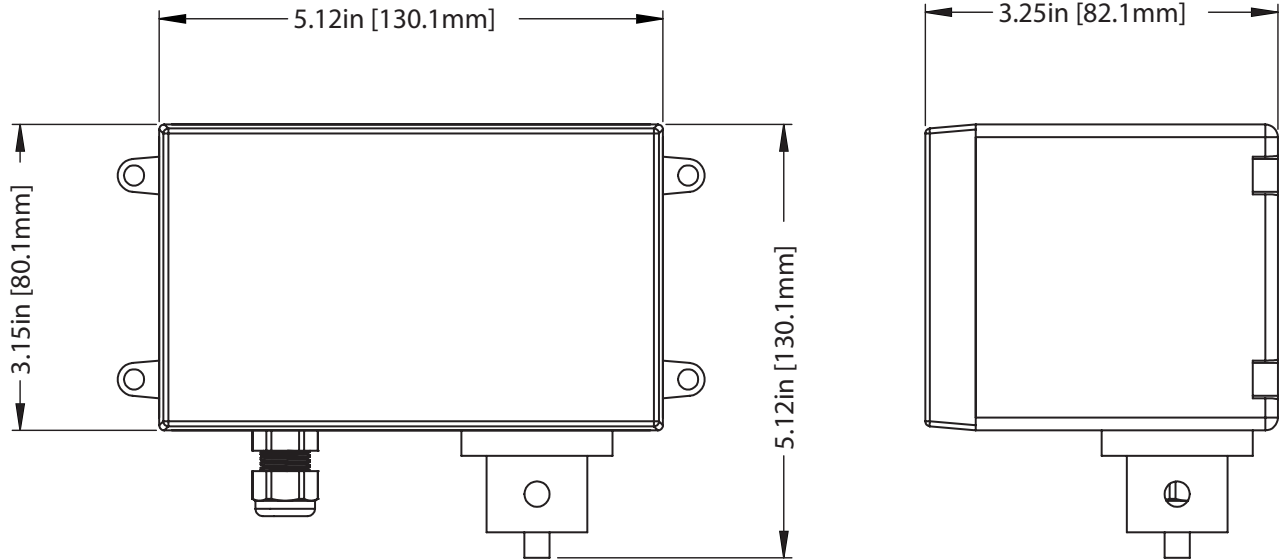
Alarm: Built-in 90 dB horn and LED indicators

Enclosure: Polycarbonate resin (flame retardant and UV stabilized), NEMA 2

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Installation Dimensions



Ordering Information

Part No.	Description	Housing	Weight
580 3007	Dual Oxygen/Carbon Dioxide Monitor with 110 VAC / 24 VDC Power Supply	Polycarbonate	1.6 lbs (0.8 kg)

Related Options

Part No.	Description	Housing	Weight
580 3005	Remote Display Alarm Indicator for Dual Oxygen/Carbon Dioxide Monitor 5803007 (displays oxygen concentration only)	PC/ASA Plastic	0.5 lbs (0.23 kg)
580 3006	Horn and Strobe, Red, 82-100 dB @ 10 ft (92-110 dB @ 1 m)	ABS Plastic	0.8 lbs (0.45 kg)
580 3006-A	Horn and Strobe, Amber, 82-100 dB @ 10 ft (92-110 dB @ 1 m)	ABS Plastic	0.8 lbs (0.45 kg)
580 3006-B	Horn and Strobe, Blue, 82-100 dB @ 10 ft (92-110 dB @ 1 m)	ABS Plastic	0.8 lbs (0.45 kg)