# **580 Series Oxygen Deficiency Monitor**



The 580 Series Oxygen Deficiency Monitor is a compact system that is ideal for the continuous monitoring of oxygen levels in any area where inert gases or confined space may produce a hazardous reduction in the oxygen content of the air. The oxygen deficiency monitor ensures that gases such as nitrogen, helium, and argon are safely stored and used and any leaks are detected before safety is jeopordized. The unique long lasting zirconium sensor provides accurate and stable response to changes in oxygen concentration over a wide range of temperature and humidity conditions and does not drift due to weather or temperature. The CONCOA 580 Series Oxygen Deficiency Monitor may be used as a stand-alone gas detector, linked to optional CONCOA single or multi-point controllers, or connected to an existing centralized monitoring system.



#### **Typical Applications**

- Laboratory or Industrial Gas Storage and Use Areas
- · Laboratories with Incubators
- · Control Rate Freezers
- · Environmental Chambers
- · Cryogenic Research

#### **Features**

Non-depleting Long Life Sensor Cell provides 10+ years of operation under normal conditions

Self-checking Features ensure continuous and reliable operation

Built-in Non-latching Alarm resets automatically when oxygen levels return to above the alarm threshold

Two User-adjustable Alarm Setpoints permit flexible system integration

90dB Audible Alarm activates immediatly with no delay when oxygen levels go below selected alarm thresholds

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

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

Optional Remote Digital Alarm Indicator mirrors the oxygen deficiency monitor's display providing remote system

#### **Materials and Specification**

**Sampling Method:** Diffusion **Gas Detected:** Oxygen

**Range:** 0 - 25%

Accuracy: ±1% of full range

**Operating Temperature:** -40°F to 140°F (-40°C to 60°C)

**Display:** 3/4 in LCD digital display, back lit **Sensor Type:** Zirconium oxide sensor cell

Response Time: Within one second of any change in O<sub>2</sub>
Sensor Life: Eight to ten plus years under normal conditions

Power Requirement: 24 VDC (250mA)

Analog Output: 4-20mA

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

Alarm: Built-in 90 dB horn and LED indicators

# 580 SERIES OXYGEN DEFICIENCY MONITOR

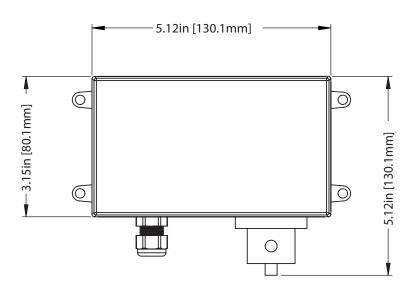


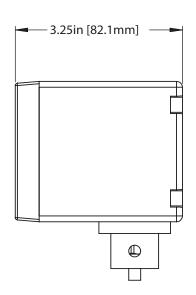
## **Materials and Specifications**

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

Weight: 1.6 lbs. (0.8 kg)
Conformances: CE, UL/cUL

### **Installation Dimensions**





Ordering Information			
Part No.	Description	Housing	Weight
580 3004	Oxygen Deficiency Monitor with 110 VAC / 24 VDC Power Supply	Polycarbonate NEMA 2	1.6 lbs (0.8 kg)
Related Options			
Part No.	Description	Housing	Weight
580 3005	Remote Display Alarm Indicator for Oxygen Deficiency Monitor 5803004	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)