

CEM O₂/TM TRACE OXYGEN ANALYZER

Flow-insensitive sample design, suitable for sample streams with condensables and particulate.

SENSOR

Principle of Operation: Zirconium oxide

Operating Range: 1 ppm to 100% O₂

Accuracy:

Percent: ± 0.75% of reading or 0.05% O₂, whichever is greater

PPM: ± 2% of reading or 0.5 ppm O₂ absolute, whichever is greater

Response Time: < 10 seconds at 1.0 L/min (2 scfh) to 90% of 2-decade step change.

Repeatability:

Percent: ± 0.5% of reading or 0.1% O₂ absolute, whichever is greater

PPM: ± 0.5% of reading or 0.1 ppm O₂ absolute, whichever is greater

Drift: < 0.1% of cell output per month; < 0.005% O₂ per month with 2% O₂ applied

Maximum Inlet Temp: 400°F (204°C)

Sample Flow: 1.0 L/min (2 scfh)

Environment:

Ambient Temp: 0°F to 122°F (-18°C to 50°C)

Relative Humidity: 10% to 90%, non-condensing

Enclosure: Indoor use only

Power Requirements: 115 VAC, ± 10%, 47-63 Hz; 230 VAC, ± 10%, 47-63 Hz, 1670 VA max.

Calibration Gas Flow Rate: 1.0 L/min (2 scfh)

Zero Gas: 0.1 PPM to 10% O₂, balance N₂

Span Gas: Minimum one decade above zero gas (10 times greater)



SERIES 2000 CONTROL UNIT

Display: Four line x 20 character vacuum fluorescent. Displays combinations of oxygen, time and date, cell temperature, user programmable text, thermocouple mV or cell mV. Password protection, programmable pressure compensation and context-sensitive help are also provided.

Analog Output: Two isolated linear current outputs. Select O₂, cell temperature, thermocouple mV or cell mV. Each output can be 4-20 mA, 0-20 mA, 20-4 mA or 20-0 mA, and is fully scalable. Hold or track during calibration and select degree of damping. Maximum load 1200 ohms.

Alarms: Two independent oxygen alarms, each high or low selectable. One alarm can be assigned as oxygen, calibrate or verify. Set relays to energize or de-energize on alarm.

Contact Rating: 0.5A, 30V 10VA max. noninductive load, AC or DC

Diagnostics: Watchdog timer and service alarms. System test for A/D, RAM, EEPROM and keypad. Display line 4 reserved for full text error and diagnostic messages. Twenty entry exception log for automatically detected system events.

Communications: RS-485, 2-way addressable

Environment:

Ambient Temp: 14°F to 122°F (-10°C to 50°C)

Relative Humidity: 10% to 80%, non-condensing

Enclosure: Standard GP (general purpose) 19" rack mount. Optional GP panel or wall mount, weatherproof NEMA 4 (IP56) and NEMA 4X (IP56) enclosures available. All are UL Listed for NEC Class I, Division 2 areas.

Calibration: Store last calibration and verification data. Selectable calibration gas run time and process recovery time. Timed automatic calibration with optional Remote Calibration Unit. Oxygen cell lifetime extender. Single gas verification that analyzer is within calibration limits.

Power Requirements: Nominal 115-230 VAC ±10%, 47-63 Hz, 75 VA max.

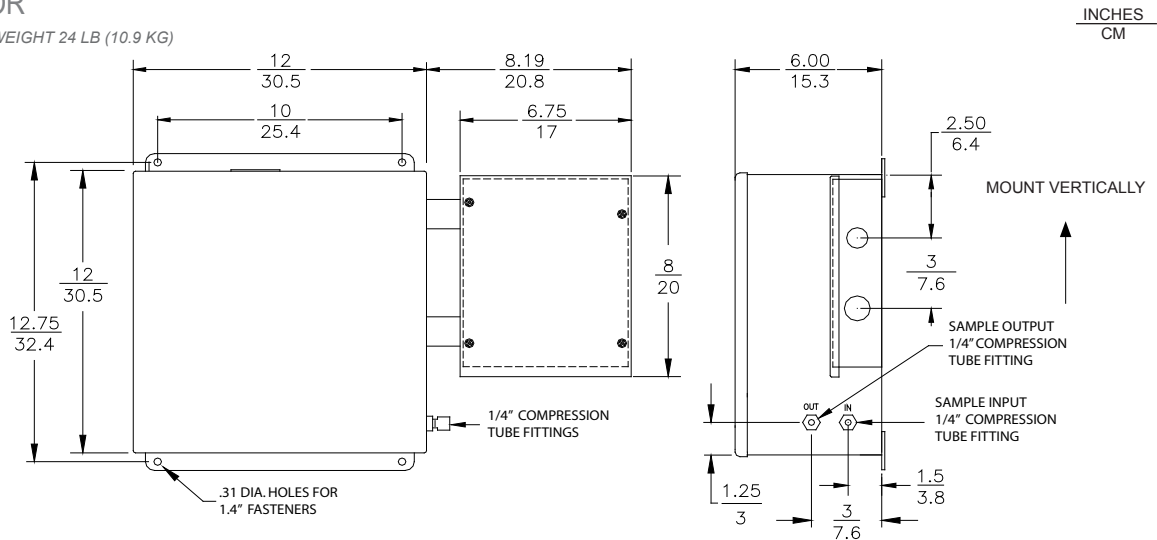
System Compliance:

EMC Directive 2004/108/EC
Low Voltage Directive 73/23/EEC

CEM O₂/TM ANALYZER

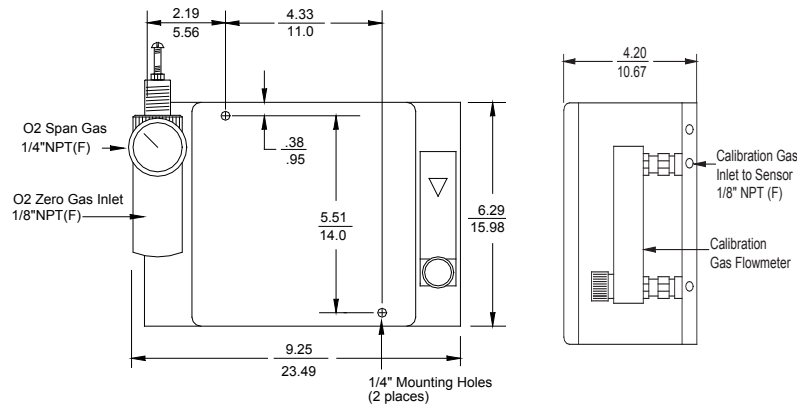
SENSOR

APPROX. WEIGHT 24 LB (10.9 KG)



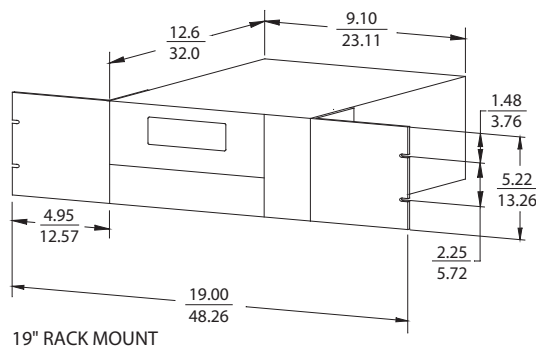
REMOTE CALIBRATION UNIT

APPROX. WEIGHT: 8 LB (3.6 KG)



SERIES 2000 CONTROL UNIT

APPROX. WEIGHT: 14 LB (6.36 KG)



- NOTES:
1. All static performance characteristics are with operating variables constant.
 2. System accuracy referenced to 0.1 to 10% calibrated range.
 3. Response is to calibration gas.

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Specifications subject to change without notice.

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