

MODEL C5E



Neutronics
Gas Analysis Solutions

Handheld oxygen analyzer with internal pump

Compact. Rugged. Reliable.

- 0 to 25% measurement range
- High performance electrochemical sensor calibrates with ambient air
- Quick response time with no warm-up required
- Internal pump automatically draws a gas sample to the sensor
- Integral moisture trap and line filter protects the sensor from contaminants

Description

The Model C5E is a battery powered, handheld oxygen analyzer with internal pump that quickly provides an easy-to-read digital LED display of 0 to 25% oxygen with 0.01% oxygen maximum resolution. Rugged and compact, this handheld analyzer is suitable for a variety of applications including combustion tuning, high purity welding, lab scale processing, and oxygen monitoring on the production floor.

Reliable Sensor Technology

The oxygen sensor is a small, diffusion limited fuel cell that converts oxygen concentration by volume directly into low level electrical current. Using a capillary as the diffusion interface makes the C5E sensor more robust with better temperature and pressure coefficients than membrane type oxygen cells. At about the same size as a standard "C" size flashlight battery, the oxygen sensor is inexpensive, maintenance free, and disposable, and it is unaffected by most background gases.

Two Sampling Modes

The C5E features two sampling modes. The timed ON mode provides for repeatability in multiple samples and maximizes battery life. With the switch in the ON position and the start button pressed, the analyzer takes a 20-second timed sample and displays the percentage of oxygen for 30-seconds. With the switch in the CAL position, the analyzer will sample and display the oxygen concentration continuously.

Easy to Maintain

An integral moisture trap and line filter protect the oxygen sensor from potential contaminants. The sensor calibrates easily with the push of a button in ambient air, and it is disposable and simple to replace. A warning indicator light illuminates when the batteries require replacement. The metal stand-off prevents damage caused by contact with hot surfaces. The built-in Stainless Steel sample probe folds away when not in use.



Specifications

| | |
|---------------------------|---|
| Type | Handheld oxygen analyzer |
| Operating range | 0-25% oxygen by volume |
| Sensor type | Electrochemical |
| Display resolution | 0 to 4.99% (2 decimal places) 5 to 25% (1 decimal place) |
| Accuracy | 2% of the measurement range at STP for 0 to 5% range 0.5% of measurement range at STP for 5 to 25% |
| Repeatability | 0.2% full scale @ STP |
| Response time | T90 < 15 seconds |
| Warm up time | Instantaneous |
| Relative humidity | 0 to 95%, non-condensing |
| Operating temperature | 0° C to 40° C (32° F to 140° F) |
| Storage temperature | -15° C to 40° C (5° F to 140° F) |
| Sampling method | Extractive (internal sample pump with Stainless Steel sample probe) |
| Regulatory compliance | CE |
| Power | 4 AA batteries, 6VDC nominal, 4.6VDC minimum |
| Materials of construction | Molded high impact plastic enclosure |
| Dimensions (LxWxH) | 6.20" (158mm) x 3.55" (90mm) x 2.5" (64mm) |
| Weight | 1 lb. (0.45kg) |

Order Information

| Part Number | Item |
|----------------|-------------------------------------|
| 7-01-1000-70-1 | C5E handheld analyzer |
| 6-01-1000-41-0 | Oxygen sensor |
| 2-02-7000-08-0 | Sponge filter |
| 6-02-1001-34-0 | Stainless steel sponge (water trap) |
| 2-06-2000-99-0 | Vinyl pouch |
| 5-06-1900-05-0 | Operations manual |



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