

# 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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