

MODEL 65



The AMI model 65 is the ideal solution for measuring oxygen in non-flammable gases in a general purpose environment. In a very small size, and at very low cost, it provides a basic electronic package with a single range voltage output (isolated current output optional) together with a zirconium oxide sensor that has an expected ten year life, with virtually no calibration required.

- Percent oxygen in non-flammable samples
- General purpose self-contained oxygen sensor
- Extremely stable, long-life sensor
- Virtually unaffected by temperature changes
- Virtually unaffected by barometric pressure changes
- Virtually unaffected by humidity changes
- Virtually unaffected by flow rate changes
- Calibration interval 6 months
- Very small size
- Standard 0-1V output
- Isolated 4-20mA output optional
- RS232 communications optional
- Very low cost

Traditional electrochemical oxygen analyzers suffer from poor stability, requiring monthly calibration and frequent sensor replacement, and they suffer from sensitivity to both temperature changes and barometric pressure changes. Their reading can change by as much as 10% when a weather change occurs. The AMI model 65 suffers from none of these issues. It has been tested over a temperature range of 0°F to 130°F.

Its sensor is unaffected by flow rate changes over the range of 0.1 to 5 SCFH.

The model 65 is designed for integration into a user's system as a stand-alone oxygen sensor. In standard form, it provides a voltage output of 0-2.5V corresponding to 0-25% oxygen, while requiring only about 3 watts of power. A built-in microprocessor controls the sensor heater and automatically linearizes the sensor output while remembering a calibration factor that can be altered if required over an optional RS232 link. Since the sensor is non-depleting the unit may be stored indefinitely in a power off state without worrying about sensor life issues. In many cases it may be used with no calibration required over its entire life. Since the unit is not flow rate dependent a simple sample system is normally adequate, or it may be specified with a diffusion screen for ambient applications. Optional ranges of 0-50% and 0-95% available.

Typical applications:

Nitrogen purity
Inert gas blanketing
Produce blanketing
Oxygen deficiency in enclosed spaces
Oxygen purity
Refrigeration units
Refrigerated trucks
Produce trailers

SPECIFICATIONS

- Standard ranges:
- Single range: 0 - 25% (0 – 50%, 0 - 95% optional).
- Sensitivity: 0.5% of full scale.
- Repeatability: +/- 1% of full scale at constant temperature.
- Operating temperature: -4°F to 122°F (-20°C - 50°C).
- Humidity: < 85%, non-condensing.
- Operational conditions: Pollution degree 2, Installation category I I.
- Response time:
90% of full scale < 13 seconds.
- Outputs: 0 - 2.5 VDC (4-20mA optional).
- Power requirements: Between 7 and 28 VDC (nominally 24VDC) Typically 250 mA at 12V with no external draw from the 5V supply. Current draw is higher at lower voltage and lower at higher voltage.
- Dimensions: 2.15 Dia. x 2" high (not including fittings or leads).
- Weight: less than 1 lb.
- Warranty: 2 years parts and labor.
- Sensor warranty: 2 years.

OPTIONS

- Display unit
- 0-50% range
- 0-95% range
- 4-20mA output
- RS232 bidirectional communications
- Diffusion screen
- Barbed fittings
- Compression fittings