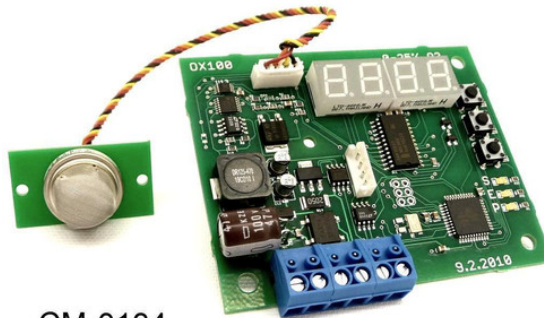


Datasheet: TR250Z Oxygen Sensor



CM-0134

The TR250Z is a long life 0-25% or 0.1-95% oxygen level transmitter that provides multiple analog linear outputs of O₂ concentrations. It is designed to be rugged, maintenance-free and can be calibrated in normal air of any known oxygen concentration.

FEATURES:

- Can be calibrated in normal air or any known O₂ concentration
- Non-consumptive technology
- Automatic or manual calibration
- Linear 0-10V, 4-20mA or RS485-MODBUS output of measured oxygen content
- High accuracy

O₂ Measurement

Measurement Range	0 – 25% or 0.1-95%
Sensing Method	Zirconium dioxide (ZrO ₂)
Sampling Method	Diffusion
Response Time	4 sec max diffusion time
Sensitivity	± 20 ppm ± 1 % of measured value
Accuracy	± 0.5 % (2% full scale)
Pressure Range	2 to 3000 mbar

General Performance

Operating Temperature Range	-10 to +70 °C
Storage Temperature Range	-10 to +70 °C
Operating Humidity Range	0 to 95% RH (non-condensing)
Sensor Life Expectancy	> 10 years
Maintenance Interval	no maintenance required
Self-Diagnostics	complete function check of the sensor module
Warm-up Time	≤ 100 sec
Operating Environment	Laboratory, residential, commercial, industrial spaces

Electrical/Mechanical

Power Input.....	24VDC ±10%
Current Consumption	600 mA @ 24VDC
Dimensions	3.5 x 2.75 x 0.50 inches

Communication

Analog	Linear 0 to 10V Linear 4-20mA
Digital	RS485-MODBUS

Options

Tube Cap.....	Allows transmitter to be built into a closed-loop gas system
Mount Shield	Heavy duty sensor protection with threaded assembly.

*CM-0134 25% O₂
Transmitter*

*CM-0134-WT 25% O₂
Transmitter with Tube
Sampling*

*CM-0150 25% O₂ with
Mount Shield*

*CM-0160 95% O₂
Transmitter*

*CM-0160-WT 95% O₂
Transmitter with Tube
Sampling*