

O₂ Sensor Transmitter (Zirconia Type) KCD-ON320



Features & Benefits

- Zirconium Dioxide(ZrO₂) sensing elements
- Long life, non-depleting technology
- Integral heating element
- Multiple output 0-5Vdc 0-10Vdc, 4-20mA, RS-485
- High accuracy linear output
- Simple calibration
- Application
 - Combustion control including oil, gas and biomass boiler applications.
 - Laboratory & building air quality monitoring including confined space personnel safety.
 - Industrial process control i.e. gas mixing for welding and steel making
 - Oxygen generation systems.
 - Scientific including respiratory studies of a community or an organism, plants and animals.
 - Food and beverage packaging.
 - Applications where low oxygen (>0.5%) is key. Such as fermentation, rust and corrosion prevention.

Notice

Concentration of oxygen in the atmosphere is known to be about 20.9% (20.946%), which is a dry standard. It is set to 20.7% considering the ambient and humidity conditions when calibrated by the atmospheric reference button. Any value can be set as a communication method if the correct condition of the gas for calibration can be achieved. For the setting method, please refer to separate communication protocol data.

Technical data

Measurement	Measurement range	0.1 ⁽¹⁾ ~ 25.0 %O ₂ (Option 95%)
	Measuring met	Solid electrolytes (Zirconia)
	Accuracy After Calibration ⁽²⁾⁽³⁾	< ±1 %
	Repeatability	±1 % of measured value
General Conditions	Operating Temperature	-20 ~ 70 °C
	Operating Humidity	98%RH, (non condensing)
	Permissible gas temperature	-10 °C to +50 °C
	Heater Warm up time	About 3min
Interface	Calibration Button	Default (Factory calibration) Span (20.7%) ⁽⁴⁾
Electrical	Power supply	12~24 VDC ⁽⁵⁾
	Power consumption	3W
	Analog output	4~20mA, 0~5VDC
	Communication	RS-485 (Modbus RTU)
Dimensions	Body	□53mm x 53mm
	Weight	60g

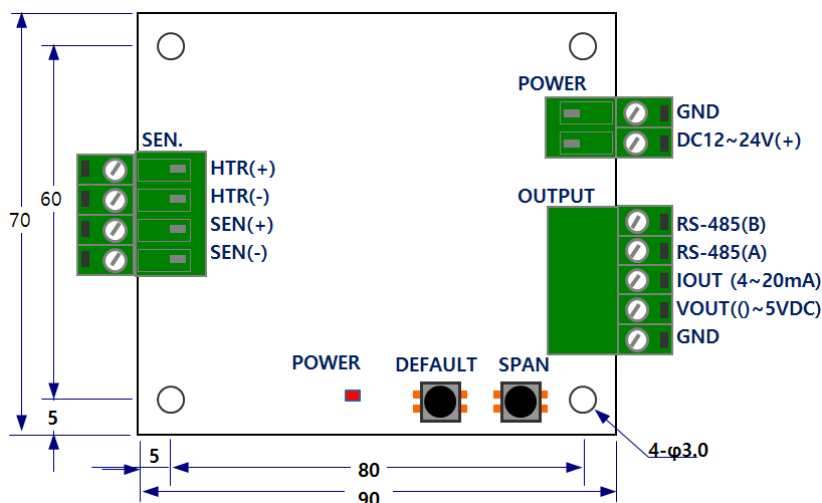
(1) Prolonged operation below 0.1%O₂ can damage the sensing element.

(2) Assuming barometric pressure remains constant.

(3) As the O₂ sensor measures the partial pressure of oxygen within the measurement gas deviations in the barometric pressure from that present during calibration will cause readout errors proportional to the change.

(4) If the current concentration is known, it is possible to calibrate the current value through communication..

Outside View



※ Specifications and appearance are subject to change without notice..