

## O<sub>2</sub> Sensor



### Features & Benefits

- Zirconium Dioxide(ZrO<sub>2</sub>) sensing elements
- Stably for a long time
- Including internal heater elements
- Multiple output  
4~20mA, 0~5VDC, RS-485(Modbus RTU)
- High precision & accuracy
- Output signal with good linearity
- Simple calibration
- Easy installation in any environment
- Application
  - protection of human life due to lack of oxygen.
  - Prevention of worker safety accidents in confined areas.
  - Controller of combustion equipment such as gas and oil.
  - Monitoring air quality in workplace and laboratories.
  - For gas mixing process control such as steelworks.
  - For oxygen generator control.
  - Medical and related laboratory equipment such as cell culture.
  - Crop storage, storage and transportation equipment.
- Detection for fermentation, decay.
- SENSECUBE Logger Program SR100, can be utilized. installation environment It is Microsoft WINDOWS 7/8/10.

(See website for details)



## ( Zirconia Type ) KCD-ON420

### Specification

Measurement	Measurement range	0.1 <sup>(1)</sup> ~ 25.0 %O <sub>2</sub>
	Sensing method	Solid electrolytes (Zirconia)
	Accuracy After Calibration <sup>(2)</sup>	±0.5 % O <sub>2</sub>
	Repeatability	< 30sec (90% Value)
General Conditions	Operating Temperatur	-10 ~ 50 °C
	Operating Humidity	0~85%RH, (non condensing)
	Sensor life	More than 3 years, (with power connection)
Electrical	Power supply	12~24 VDC <sup>(3)</sup>
	Power consumption	About 3W
Electrical Spec Dimensions	Analog output (Option )	4~20mA, (or 0~5 VDC, 0~10VDC)
	Communication	RS-485 (Modbus RTU)
	Dimensions	Sensor Φ25mm x 115mm Cable 5C (22AWG) x 1.5m
	Weight	Sensor 50g, Cable 70g

(1) Prolonged operation below 0.1%O<sub>2</sub> can damage the sensing element

(2) Please calibrate under stable atmospheric pressure.

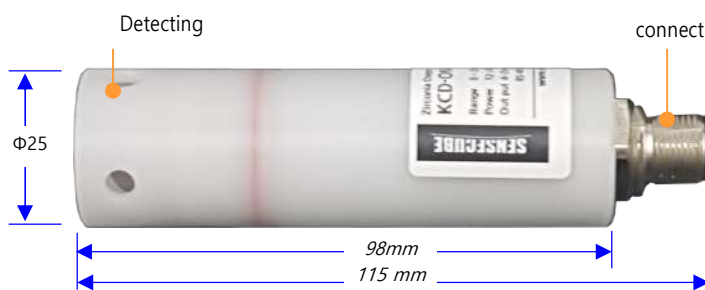
Since the sensor measures the gas concentration by the partial pressure of oxygen in the device, deviation occurs according to the atmospheric pressure during calibration.

However, It can be used after being calibrated under the atmospheric pressure condition of the operating environment.

If the current concentration is known, it is also possible to calibrate to the current value through communication.

(3) If analog output 0~10VDC, apply 14VDC or higher power.

### Outside View



### Connector



#### Sensor connector pin configuration

- ① +V (Brown)
- ② GND (Black)
- ③ RS-485(+) (Gray)
- ④ RS-485(-) (Blue)
- ⑤ Analog Output (White)

※ Specifications and appearance are subject to change without notice.