

DATA SHEET

OXY-COMM-RS485

Oxygen Analyser

FEATURES

- 8—15V_{DC} supply voltage with reverse polarity and transient overvoltage protection
- Networkable, fault tolerant RS485 interface, short circuit and overvoltage protection
- Can be calibrated in fresh air (20.7% O₂) or to any other known O₂ concentration
- Barometric pressure compensation



Housing



Supply Voltage



Operating Temp



Output Digital



Response Time



APPLICATIONS

- Refrigerated transportation containers
- Protecting historical artefacts against oxidation
- Fire prevention in facilities such as server rooms, or document storage

OUTPUT VALUES

| | |
|--|-------------------------|
| Initial output stabilisation time | < 10mins |
| Oxygen measurement range ¹ | 0.1—100% O ₂ |
| Accuracy after calibration in fresh air to 20.7% O ₂ ² | < ±0.5% O ₂ |
| Accuracy after calibration in 100% O ₂ ³ | < ±0.5% O ₂ |
| Repeatability | < ±0.5% O ₂ |
| Measurement resolution | 0.01% O ₂ |
| Response time (10—90%) | < 15s |
| Heater warm up times (no oxygen measurement): | |
| OFF Mode to ON Mode | 60s |
| Standby Mode to ON Mode | 20s |
| Cleaning Mode to ON Mode | 5s |

TECHNICAL SPECIFICATIONS

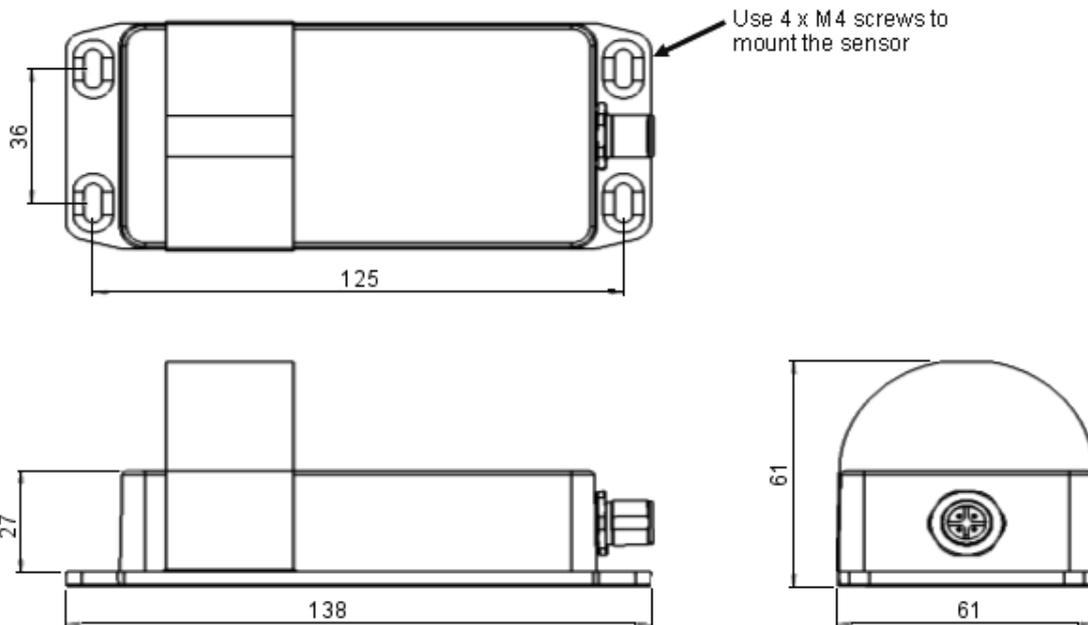
| | |
|-----------------------------|------------------------------------|
| Supply voltage | 8—15V _{DC} |
| Bus pin faults | ±60V _{DC} |
| Current consumption | 950mA at 12V _{DC} maximum |
| Temperature: | |
| Storage | -40°C to +85°C |
| OFF Mode | -40°C to +85°C |
| Standby Mode | -40°C to +70°C |
| ON Mode | -40°C to +60°C |
| Cleaning Mode | -40°C to +45°C |
| Absolute operating pressure | 260—1260mbar |
| Gas flow rate | 0—5m/s |
| Weight | < 300grams |
| Seal rating | IP65 |



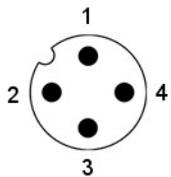
- 1) Prolonged operation below 0.1% O₂ will damage the sensing element.
- 2) Valid for oxygen measurement range 0.1—25% O₂ at SBP (1013.25mbar) ± 100mbar in ambient gas temperatures of -30°C to +60°C.
- 3) Valid for oxygen measurement range 0.1—100% O₂ at SBP (1013.25mbar) ± 100mbar in ambient gas temperatures of -30°C to +60°C.

OUTLINE DRAWING AND MOUNTING INFORMATION

All dimensions shown in mm. Tolerances = ±1mm.



ELECTRICAL INTERFACE



Brad Harrison style
4-pin M12 connector
Code A

| Pin | Designation |
|-----|---------------------|
| 1 | 8—15V _{DC} |
| 2 | RS485 A (+) |
| 3 | 0V _{DC} |
| 4 | RS485 B (-) |

ORDER INFORMATION

Specify the part number listed below when ordering. Include the 'OXY' prefix.

O X Y - C O M M - R S 4 8 5

WARNING!

Personal Injury

DO NOT use these products as safety or Emergency Stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in serious injury or death!

CAUTION

Do not exceed maximum ratings and ensure sensor(s) are operated in accordance with their requirements.

Carefully follow all wiring instructions. Incorrect wiring can cause permanent damage to the device.

DO NOT use chemical cleaning agents.

Failure to comply with these instructions may result in product damage.

INFORMATION

All sensors are tested at ambient environmental conditions unless otherwise stated. As customer applications are outside of SST Sensing Ltd.'s control, the information provided is given without legal responsibility. Customers should test under their own conditions to ensure that the equipment is suitable for their intended application.

General Note: SST Sensing Ltd. reserves the right to make changes to product specifications without notice or liability. All information is subject to SST Sensing Ltd.'s own data and considered accurate at time of going to print.