DATA SHEET

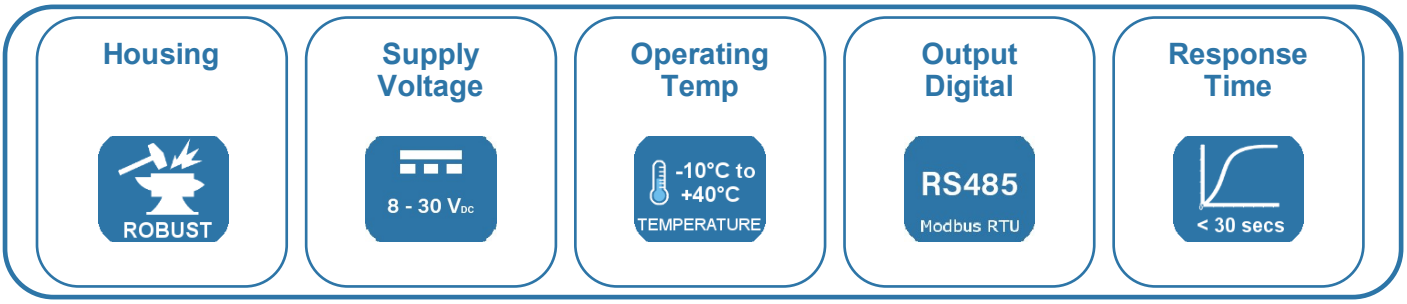
DESIGN • MANUFACTURE • CUSTOMISE • CONFIGURE

Oxygen Sensing—LuminOx Trace Sensor

Industrial Luminescence-based Optical Flow-Through Series

FEATURES

- Operates in any oxygen concentration without damaging the sensor
- Highly selective and sensitive to oxygen
- Long life, non-depleting technology - no need to store in an inert gas environment
- Fast response and purge times
- Connects directly to a controller via RS485 interface
- Factory calibrated - User calibratable[a]
- Low power - high accuracy



BENEFITS

- Compact footprint, flow-through housing with sealed base
- Contains no hazardous materials; RoHS & REACH compliant
- Insensitive to pressure fluctuations
- Can be used in vacuum applications

TECHNICAL SPECIFICATIONS

Supply voltage (Vs)	8 - 30 V_{DC}
Supply current (Is)	< 30 mA Average < 60 mA Peak
Output Type	RS485 Modbus RTU
Temperature	
Operating:	-10 °C to +40 °C
Storage:	-30 °C to +50 °C
Humidity	Dry, clean gas
Barometric pressure range	260 - 1260 mbar
Flow rate	0.5 litre / minute minimum 1.0 litre / minute maximum

OUTPUT VALUES[b]

Oxygen range	0 - 1000 ppm
Oxygen pressure range	0 - 1.2 mbar ppO_2
Response time[c]	T90 < 30 seconds (typical)
Purge time[d]	≤ 30 minutes
Accuracy	
ppO_2	< 2 % full scale (24 µbar)
Temperature	Indication only
Pressure	± 5 mbar
O_2	Determined by ppO_2 & pressure accuracy
Resolution	
ppO_2	1 µbar
Temperature	0.1 °C
Pressure	1 mbar
O_2	1 ppm

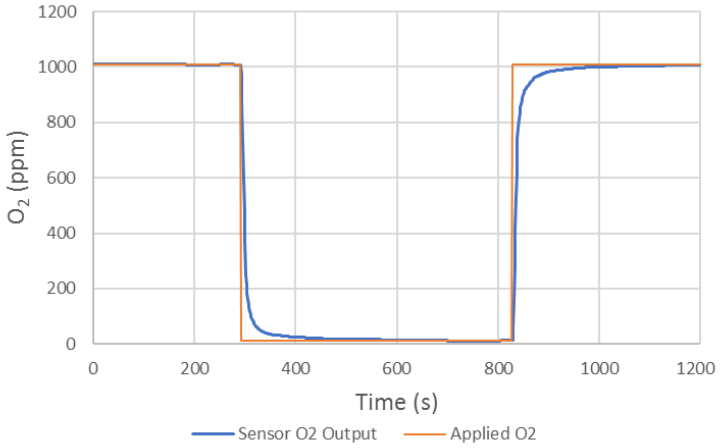
Other sensor options available on request, email: technical@sstsensing.com

Need help? Ask the expert
Tel: + 44 (0)1236 459 020
and ask for "Technical"

NOTES

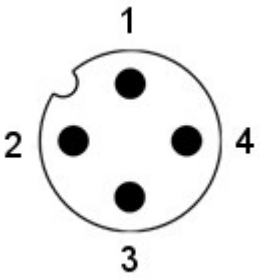
a) Refer to user guide for calibration procedure.
b) At ambient conditions. All performance measurements are at STP unless otherwise stated. Following extreme temperature fluctuations, re-calibration may be required.
c) Refer to response time graph on page 2.
d) Purge time from fresh air to 10 ppm O_2.

RESPONSE TIME GRAPH



NOTE: Graph shown reflects the following conditions: Switching between 1010 ppm and 10 ppm with a flow rate of 1 litre/ min at 20 °C. Factory default filter applied.

ELECTRICAL INTERFACE



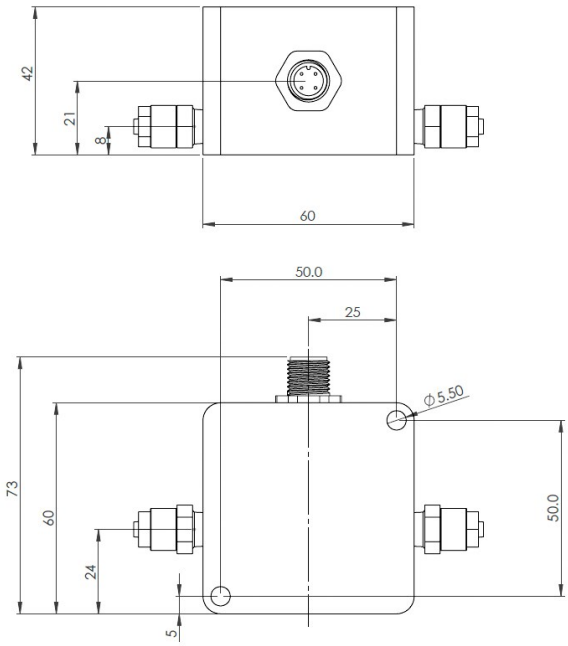
Pin	Designation
1	8 - 30V_{DC}
2	RS485 A (+)
3	0V_{DC}, RS485 REF
4	RS485 B (-)

CONNECTION: 4-pin M12 connector

NOTE: Power must always be applied to pins 1 and 3 before attempting to communicate on pins 2 and 4.

OUTLINE DRAWING

All dimensions shown in mm. Tolerances = ± 0.5 mm.



NOTE: 4.5 mm OD push-fit tubing connectors.

ORDER INFORMATION

When ordering, specify part number:

L O X - T R A C E - 1 0 0 0 - B L X

Contact sales@sstsensing.com for details.

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

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.

For technical assistance or advice, please email:
technical@sstsensing.com

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.

5 HAGMILL CRESCENT, SHAWHEAD INDUSTRIAL ESTATE, COATBRIDGE, UK ML5 4NS
www.sstsensing.com | e: sales@sstsensing.com | t: +44 (0)1236 459020 | f: +44 (0)1236 459026

RoHS
REACH COMPLIANCE