V 1.4.

TECSENSE
unique solutions in sensor technology

OXsense

a new dimension for optochemical O_2 mesasurment cells

- For ambient atmosphere or as Flow-through version
- smallest dimensions, diameter 20mm, hight 8.5mm
- lowest power consumption: standby 20µA; measurement 30mA
- battery powered lifetime up to 3 years (2xCR2032)
- precalibrated
- zero and end point adjustment by customer possible
- all versions with BLE output, range up to 80 meter
- internal data storage of 10.000 values when running in battery mode (e.g. in closed containers)
- food certified materials
- power supply 5V DC or 6V battery
- for battery mode BLE to WLAN to server infrastructure available
- UART to USB transfer unit for computer use available

Configurations

Standard packages: Batch calibrated
OXsense sensor UART or RS485/BLE 0-21% O_2
OXsense sensor UART or RS485/BLE 0-2000ppm O_2

Trial Package: Batch calibrated
OXsense sensor UART/BLE
UART – USB converter
Cable
TecService Software

Developer Package: Batch calibrated
OXsense sensor UART/BLE
Router & Router power supply
Rasperry Pi4 server & power supply
Rasperry Pi Zero transfer unit & Power supply
Cables for units

OEM Package:
OXsense sensor UART/BLE

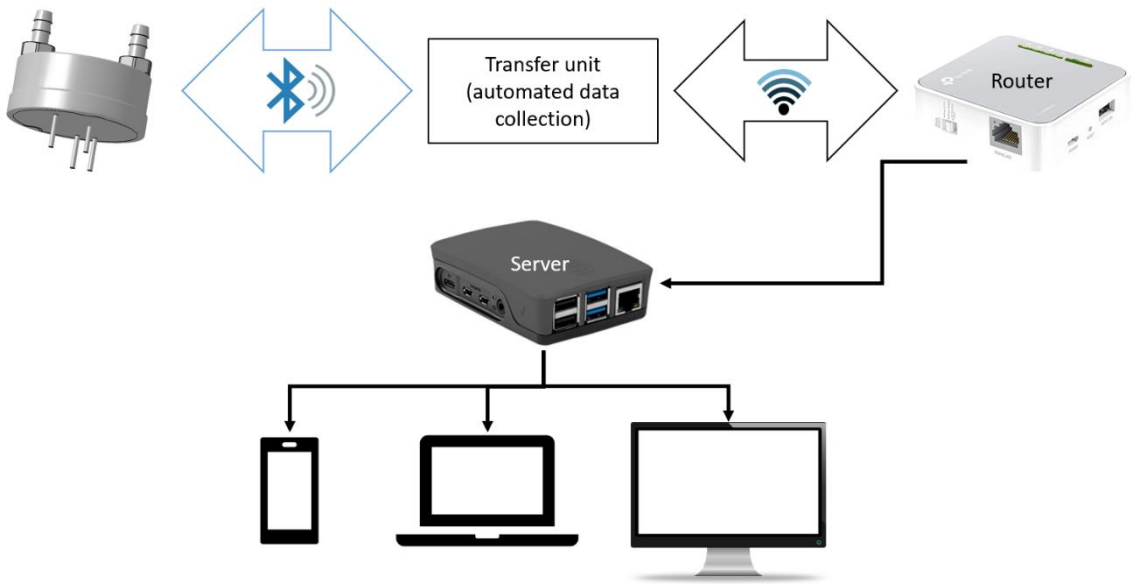
Technical Specification

TS-System	Oxsense		Oxsense	
Measuring range	0-2000 ppm		0.0-21%	
	Range	**Accuracy**	**Range**	**Accuracy**
	0-100ppm	± 2% Mev**	0-5%	± 2% Mev**
	100-1000ppm	±3% Mv*	5-15%	±3% Mv*
	1000-2000ppm	± 4% Mv*	15-21%	±4% Mv*
Resolution	1 ppm		0,01%	
Response time at 25°C/ 77°F	<15s		<5s	
Max. Pressure	2bar			
Temp. range Min./Max	0°C/ 40°C			
	32°F/104°F			
Medium	Gas			
Average lifetime LED	min. 10.000h			
Power supply	5-6V DC			
Power Consumption	Less than 1mA (BLE mode)			
Data Interface	UART or RS485/ always BLE			
Temperature compensation	4 - 40°C			
	32 - 104°F			
Pressure compensation	yes			
Data Output	digital			
Working method	Optochemical fluorescence quenching			
Connection	Electric and data: 4 pins for +/- Rx/Tx Pneumatic: 1mm silicon tube or free flow			
Guaranteed lifetime of system (0-40°C or 32-104°F; no corrosive gases. no hydrocarbon)	12 months			
Recommended zero-point adjustment interval by customer	3 months			
Replacement of system	3 years			
Warranty	1 Year ex works			

**Mev = measured end value

*Mv = measured value

Data transfer structure



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