

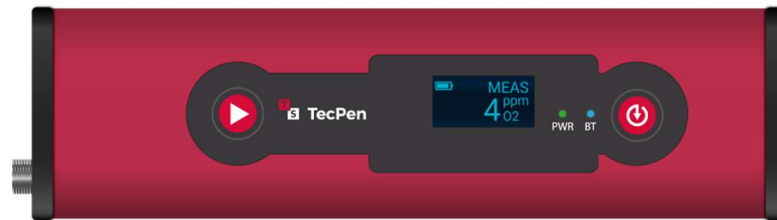


TECSENSE

unique solutions in sensor technology

TecPen Fiber -

Optical Oxygen-Sensor glass fiber optic for QC and R&D
In gases and fluids



- Opto-chemical O₂ sensor system for gases and fluids (pH 01 -13)
- Glass fiber-sensor 0,4mm diameter in flexible protective hose, max. 4m
- Measurement at the needle tip – no gas extraction
- For smallest gas- and fluid volumes
- Factory calibrated – no periodical calibration necessary – plug and play
- Self diagnostic system
- Short measurement time, < 5s



Application

- MAP-packaging, smallest volumes possible (MAP-blister container, etc.)
- Headspace-measurements in beverage bottles, tanks
- In injection syringes, vials, cells growth containers, well plates
- Micro – bioreactors
- In molecular biological to monitor cell and tissue O₂ supply
- Medical R&D – online monitoring of tissue O₂ supply

Technical Specification

TS-System	TecPen Fiber	
Measurement range	0-15%	
	Range	Accuracy
	0-2%	± 2% Mev**
	2-5%	±3% Mv*
	5-15%	±4% Mv*
Resolution	0,001%	
Response time at 25°C/ 77°F	<150ms	
Temp. range Min./Max	-10°C/ +60°C	
	14°F/140°F	
Medium	Gas or Fluid	
Power supply	5V USB and LiPo battery	
Rechargeable battery lifetime	> 3h	
Data Interface	USB	
Temperature compensation	10-30°C	
	50-86 °F	
Display	OLED Display	
Cleaning	No organic solvents, 40% EtOH	
Parts touching sample	St.1.4404/ PTFE/ Glass	
Connection	USB/ Bluetooth 4.0	
Case	aluminium anodized	
Protection	IP65	
Main service interval (Service including necessary retrofitting)	3 years	
Sensor cap replacement interval	every 6 months	
Recommended adjustment by customer	every 3 months	
Warranty	1 Year ex works Grambach	

**Mev = measured end value

*Mv = measured value

Scope of delivery

- TecPen Fiber inkl. Case
- Sensor cable
- Temperatur sensor
- USB-Cable
- USB Stick
 - o Declaration of conformity
 - o User Guide