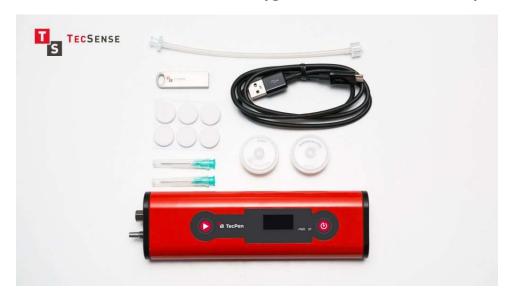# TecPen MAP

Mobile device for determination of Oxygen in QC and Production processes

Measurement of O_2 content in all closed and pierceable containers

- Optochemical O_2 sensor system for gaseous media
- High flexibility due to handy design
- Suitable for very low gas volumes
- Easy to use due to factory calibration and built-in display
- Immediate operational readiness, without warm-up time
- High measuring accuracy
- Integrated memory & data transfer via USB
- Replaceable particulate filter
- Automatically 0-point adjustment wtih every single start

Application

- In food Packaging with inert gas atmosphere (MAP packaging)
- In the head space of vials, cell culture vessels, infusion containers, syringes
- In micro-bioreactors

Technical Data

TS-System	TecPen MAP O2		TecPen MAP CO2	TecPen MAP O2	
Measurementrange	0-5%		0-100% CO2	0-15%	
	Range	Accuracy	Accuracy	Range	Accuracy
	0-2%	±2%	±70 ppm +/- 5% of measuring value (100% Range ±300 ppm +/- 5% of measuring value	0-2%	±2%
	2-5%	±3%		2-5%	±3%
				5-15%	±4%
Resolution	0,05		0,05	0,05	
Responsetime at 25°C	<150ms		<1min	<150ms	
Pump flow	67 mL		67 mL	67 mL	
Max. Pressure					
Temp. range Min./Max	-10°C / +120°C		-25°C/55°C	-10°C / +120°C	
Medium	Gas		Gas	Gas	
Power supply	5V USB and LiPo Accu		5V USB and LiPo Accu	5V USB and LiPo Accu	
Acculifetime	> 3h		> 3h	> 3h	
Data Interface	USB		USB	USB	
Temperature compensation	25-60°C		25-60°C	25-60°C	
Display	OLED Display		OLED Display	OLED Display	
Cleaning	no organic solvents, 70% EtOH		no organic solvents, 70% EtOH	no organic solvents, 70% EtOH	
Parts touching sample	St.1.4404/ PTFE/ Glas		St.1.4404/ PTFE/ Glas	St.1.4404/ PTFE/ Glas	
Connection	USB/ Bluetooth 4.0		USB/ Bluetooth 4.0	USB/ Bluetooth 4.0	
Case	aluminium anodized		aluminium anodized	aluminium anodized	
Protection	IP66		IP68	IP68	
Delivery	Sensor (calibrated)		Sensor (calibrated)	Sensor (calibrated)	
Guarantee	1 Year ex works Grambach		1 Year ex works Grambach	1 Year ex works Grambach	