

TecPen MAP –

Mobile device for determination of Oxygen in QC and Production processes

- Measurement of O₂ content in all closed and pierceable containers
- Optochemical O₂ 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 with every single start



Advantages

The low weight, easy handling and product-related storage of the data available in digital form make the use of TecPen MAP a routine process without high implementation costs.

Application

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

Should not be used for

- Organic gases
- Corrosive gases



Technical Specification									
TS-System	TecPen MAP O2								
Measurement range	0-5%								
	<table border="1"> <thead> <tr> <th>Range</th> <th>Accuracy</th> </tr> </thead> <tbody> <tr> <td>0-0,5%</td> <td>± 2% Mev**</td> </tr> <tr> <td>0,5-2,5%</td> <td>±3% Mv*</td> </tr> <tr> <td>2,5-5%</td> <td>±5% Mv*</td> </tr> </tbody> </table>	Range	Accuracy	0-0,5%	± 2% Mev**	0,5-2,5%	±3% Mv*	2,5-5%	±5% Mv*
	Range	Accuracy							
0-0,5%	± 2% Mev**								
0,5-2,5%	±3% Mv*								
2,5-5%	±5% Mv*								
Resolution	0,001%								
Response time at 25°C/ 77°F	<150ms								
Pump flow max.	67 mL								
Temp. range Min./Max	-10°C/ +60°C								
	14°F/140°F								
Medium	Gas								
Life time of sensor spot (protective atmosphere; 0-40°C)	24 months								
Power supply	5V USB and LiPo battery								
Rechargeable battery lifetime	> 3h								
Data Interface	USB and Bluetooth 4.0								
Temperature compensation	10-30°C								
	50-86 °F								
Display	OLED Display								
Cleaning housing	no organic solvents, 40% EtOH								
Parts touching sample	St.1.4404/ PTFE/ Glass								
Case	aluminium anodized								
Protection	IP65								
Main service interval (Service including necessary retrofitting)	3 years								
Sensor cap replacement interval	2 years								
Recommended adjustment by customer	6 months								
Warranty	1 Year ex works								

**Mev = measured end value

*Mv = measured value

Scope of delivery

- TecPen MAP incl. case
- 1 USB-Cable
- 1 USB-Stick
 - o Certificate of declaration
 - o User Guide
- 1 pocket
- 12 septa
- 2 Cannula 25/0.8
- 2 Particle filters
- 1 Hose adapter



TecPen MAP –

Mobile device for determination of Oxygen in QC and Production processes

- Measurement of O₂ content in all closed and pierceable containers
- Optochemical O₂ 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 with every single start



Advantages

The low weight, easy handling and product-related storage of the data available in digital form make the use of TecPen MAP a routine process without high implementation costs.

Application

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

Should not be used for

- Organic gases
- Corrosive gases



Technical Specification		
TS-System	TecPen MAP O2	
Measurement range	0-15%	
	Range	Accuracy
	0-5%	± 2% Mev**
	5-15%	±3% Mv*
Resolution	0,001%	
Response time at 25°C/ 77°F	<150ms	
Pump flow max.	67 mL	
Temp. range Min./Max	-10°C/ +60°C	
	14°F/140°F	
Medium	Gas	
Life time of sensor spot (protective atmosphere; 0- 40°C)	24 months	
Power supply	5V USB and LiPo battery	
Rechargeable battery lifetime	> 3h	
Data Interface	USB and Bluetooth 4.0	
Temperature compensation	10-30°C	
	50-86 °F	
Display	OLED Display	
Cleaning housing	no organic solvents, 40% EtOH	
Parts touching sample	St.1.4404/ PTFE/ Glas	
Case	aluminium anodized	
Protection	IP65	
Main service interval (Service including necessary retrofitting)	3 years	
Sensor cap replacement interval	2 years	
Recommended adjustment by customer	6 months	
Warranty	1 Year ex works	

**Mev = measured end value

*Mv = measured value

Scope of delivery

- TecPen MAP incl. case
- 1 USB-Cable
- 1 USB-Stick
 - o Certificate of declaration
 - o User Guide
- 1 pocket
- 12 septa
- 2 Cannula 25/0.8
- 2 Particle filters
- 1 Hose adapter





TECSENSE

unique solutions in sensor technology

TecPen MAP – O₂/CO₂

Mobile device for determination of O₂ and CO₂ in QC and Production processes

- Measurement of O₂ content in all closed and pierceable containers
- Optochemical O₂ 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 with every single start



Advantages

The low weight, easy handling and product-related storage of the data available in digital form make the use of TecPen MAP a routine process without high implementation costs.



Application

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

Should not be used for

- Organic gases
- Corrosive gases

Technical Specification		
TS-System	TecPen MAP O2/CO2	
Measurement range	0-5% O2	
	Range	Accuracy
	0-0,5%	± 2% Mev**
	0,5-2,5%	±3% Mv*
Resolution	0,001%	
	0,01%	
Response time at 25°C/ 77°F	<150ms	
Pump flow max.	67 mL	
Temp. range Min./Max	-10°C/ +60°C	
	14°F/140°F	
Medium	Gas	
Life time of sensor spot (protective atmosphere; 0- 40°C)	24 months	
Power supply	5V USB and LiPo battery	
Rechargeable battery lifetime	> 3h	
Data Interface	USB and Bluetooth 4.0	USB
Temperature compensation	10-30°C	
	50-86 °F	
Display	OLED Display	
Cleaning housing	no organic solvents, 40% EtOH	
Parts touching sample	St.1.4404/ PTFE/ Glas	
Case	aluminium anodized	
Protection	IP65	
Main service interval (Service including necessary retrofitting)	3 years	
Sensor cap replacement interval	2 years	n.a
Recommended adjustment by customer	6 months	adjustment at power on
Warranty	1 Year ex works	

**Mev = measured end value

*Mv = measured value

Scope of delivery

- TecPen MAP incl. case
- 1 USB-Cable
- 1 USB-Stick
 - o Certificate of declaration
 - o User Guide
- 1 pocket
- 12 septa
- 2 Cannula 25/0.8
- 2 Particle filters
- 1 Hose adapter





TecPen MAP – O₂/CO₂

Mobile device for determination of O₂ and CO₂ in QC and Production processes

- Measurement of O₂ content in all closed and pierceable containers
- Optochemical O₂ 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 with every single start



Advantages

The low weight, easy handling and product-related storage of the data available in digital form make the use of TecPen MAP a routine process without high implementation costs.

Application

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

Should not be used for

- Organic gases
- Corrosive gases



Technical Specification		
TS-System	TecPen MAP O2/CO2 Combo	
Measurement range	0-15%	
	0-5%	Accuracy ± 2% Mev**
	5-15%	±3% Mv*
Resolution	0,001%	0,01%
Response time at 25°C/ 77°F	<150ms	10s
Pump flow max.	67 mL	
Temp. range Min./Max	-10°C/ +60°C	-25°C/55°C
	14°F/140°F	-13°F/ 131°F
Medium	Gas	
Life time of sensor spot (protective atmosphere; 0- 40°C)	24 months	24 months
Power supply	5V USB and LiPo battery	
Rechargeable battery lifetime	> 3h	
Data Interface	USB and Bluetooth 4.0	USB
Temperature compensation	10-30°C	10-30°C
	50-86 °F	50-86°F
Display	OLED Display	
Cleaning housing	no organic solvents, 40% EtOH	
Parts touching sample	St.1.4404/ PTFE/ Glass	
Case	aluminium anodized	
Protection	IP65	
Main service interval (Service including necessary retrofitting)	3 years	
Sensor cap replacement interval	2 years	n.a
Recommended adjustment by customer	6 months	adjustment at power on
Warranty	1 Year ex works	

**Mev = measured end value

*Mv = measured value

Scope of delivery

- TecPen MAP incl. case
- 1 USB-Cable
- 1 USB-Stick
 - o Certificate of declaration
 - o User Guide
- 1 pocket
- 12 septa
- 2 Cannula 25/0.8
- 2 Particle filters
- 1 Hose adapter

