

# Oxygen Sensors for Life Supporting Systems

Use the advantages:

**Accurate and reliable response**  
**Resistant to N<sub>2</sub>O**  
**Excellent signal stability**

**High product quality**  
**Short lead times**  
**Technical support**

Meet EN ISO 21647

Designed and manufactured according to EN ISO 9001 : 2000 and EN13485 : 2003

Medical Oxygen Sensors general specifications	
<b>Measurement Range:</b>	0-100 % oxygen
<b>Accuracy and Repeatability:</b>	< 1 % vol. O2 when calibrated at 100 % O2
<b>Zero Offset:</b>	< 0,5 % vol. O2 in 100% N2, applied 5 minutes
<b>Linearity Error:</b>	< 3 % relative
<b>Cross Interference:</b>	< 0.5 % vol. O2 response to: 10 % CO2 balance N2 80% N2O balance N2 7.5% Halothane balance N2 7.5 % Isoflurane balance N2 7.5 % Enflurane balance N2 9% Sevoflurane balance N2 20% Desflurane balance N2
<b>Influence of Humidity:</b>	- 0.03 % rel. per % RH at 25°C
<b>Influence of Pressure:</b>	proportional to change in oxygen partial pressure
<b>Influence of Mechanical Shock:</b>	< 1% relative after a fall from 1m
<b>Operating Temperature:</b>	0 to 50°C
<b>Temperature Compensation:</b>	built-in NTC compensation (see below)
<b>Effect of Temperature</b>	between +5 °C and +25 °C: 3 % relative error
<b>Compensation (steady state):</b>	between 0 °C and +50 °C: 8 % relative error
<b>Operating Humidity:</b>	0-99 % RH non-condensing
<b>Long Term Output Drift:</b>	< 1 % vol oxygen per month typically < - 15 % relative over lifetime
<b>Storage Temperature:</b>	-20 to +50 °C
<b>Recommended Storage:</b>	+5 to +15 °C
<b>Recommended Load:</b>	≥ 10 kOhms
<b>Warm-Up Time:</b>	< 30 minutes, after replacement of sensor
<b>Weight:</b>	approximately 28 grams approximately 43 grams OOM107 series

Oxygen Sensor Part Number	Output Signal in Air	Response Time T 90%	Nominal Sensor Lifetime	Electrical Interface
<b>OOM101</b>	46µA – 63µA no temperature compensation	< 13 seconds	≥ 500 000 % volume Oxygen hours	Gold plated slip rings
<b>OOM102</b>	9mV – 13mV temperature compensated	< 13 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin Molex® Connector
<b>OOM102-1</b>	9mV – 13mV temperature compensated	< 13 seconds	≥ 1 000 000 % volume Oxygen hours	3.5mm Mono Jack
<b>OOM103</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	3 pin Molex® Connector
<b>OOM103-1</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	3.5mm Mono Jack
<b>OOM103-1M</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	Switchcraft® Mini Power Jack
<b>OOM104</b>	24µA – 32µA no temperature compensation	< 12 seconds	≥ 750 000 % volume Oxygen hours	Gold plated slip rings
<b>OOM105</b>	Teledyne® TED range	< 5 seconds	≥ 500 000 % volume Oxygen hours	Molex® plug 4P4C
<b>OOM106</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin Molex® Connector
<b>OOM107</b>	170µA – 230µA no temperature compensation	< 12 seconds	≥ 250 000 % volume Oxygen hours	Gold plated slip rings
<b>OOM107-2</b>	170µA – 230µA no temperature compensation	< 12 seconds	≥ 250 000 % volume Oxygen hours	Flying leads with pin-connectors
<b>OOM110</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	Modular Jack 6P4C
<b>OOM111</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3mm Stereo Jack
<b>OOM201</b>	24µA – 32µA (Dual Cathode) no temperature compensation	< 12 seconds	≥ 500 000 % volume Oxygen hours	Gold plated slip rings
<b>OOM202</b>	13mV – 16mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin molex®
<b>OOM202-1</b>	13mV – 16mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3,5mm Mono Jack
<b>OOM202-2</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	flying leads with 3pin female molex® connector
<b>OOM202-2S</b>	9mV – 11,5mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	AMP MATE-N-LOK / 2 circuit
<b>OOM204</b>	9mV – 13mV (Dual Cathode) temperature compensated	< 12 seconds	≥ 500 000 % volume Oxygen hours	3 pin molex®

All specifications are applicable at standard conditions: 1013 hPa, 25°C dry ambient air

# Oxygen Sensors for Medical Applications



OOM101



OOM102



OOM102-1



OOM103



OOM103-1



OOM103-1M

Manufacturer			EnviteC Part Number																		
Name	Type	Reference-No.:	OOM 101	OOM 102	OOM 102-1	OOM 103	OOM 103-1	OOM 103-1M	OOM 104	OOM 105	OOM 106	OOM 107	OOM 107-2	OOM 110	OOM 201	OOM 202	OOM 202-1	OOM 202-2	OOM 202-2S		
Airshields	Isolette C2000																				
		6735142																			
Analytical Industries		PSR-11-33																			
		PSR-11-77																			
		PSR-11-917-J																			
		PSR-11-917-M																			
		PSR-11-915																			
		PSR-11-915-4																			
Bio Tek		48351																			
BMD Bio Med Devices	M-10, M-2	10006																			
Bird Products (VIASYS)	6400 Vent., 8400 Vent., VIP Vent.	66030																			
	Avea. Vent																				
Catalyst Research MSA		655263																			
		655264																			
		MiniOX I,II,III & 3000	406931																		
			472062																		
			478841																		
			485905																		
City Technology		804674																			
		MiniOX IA	806572																		
		MOX-1																			
		MOX-2																			
		MOX-4																			
		MOX-7																			
Dameca	Alpha Med	42035-46																			
		Datascope	0600-00-0002																		
		Datex-Engström	Erica																		
			Elvira																		
		Dräger	Oxycom, Oxydig, Anemone, Evita, Cicero, Babylog, Fabius, PM 8030	6850645																	
			Incubator 8000	6850645																	
NAD	Narcomed	6850645																			
Hamilton	Arabella, Amadeus, Veolar	HM-01																			
		HM-03																			
		HM-10																			
		HM-11																			





OOM201



OOM202



OOM202-1



OOM202-2



OOM202-25

Maxtec	MAX-22CC																	
	MAX-250esf																	
Megamed	M1																	
	M2																	
Mercury Medical		10-103-06																
		10-103-07																
Ohmeda	4700 Oxicap, 5250 RGM, Excel Modulus, 5120 Monitor, 5125 Monitor	0237-2034-700																
	Aestiva, 7900 Monitor, Excel SE	6050-0004-110																
Pacifitech	PT-01																	
	PT-02																	
	PT-10																	
	PT-12																	
Puritan Bennett	7280 Monitor, 7200 Ventilator	4-020933-00																
	Ventilators 840, 740, 760	4-072214-00																
Sechrist	650 / 4370																	
Sensor Tec	ST-01																	
	ST-02																	
	ST-03																	
	ST-10																	
	ST-11																	
	ST-12																	
	ST-13																	
	ST-14																	
Siemens	SV 300 and 710	9004979 E347E																
	SV 300 and 710	6419332 E380E																
	SV 900 C/D																	
SLE	T-801																	
Space Labs	90514																	
Stephan	Stephanie																	
	Artec/Christina																	
Taema	Cesar (new version) / Eolo																	
	Cesar (older version)																	
Teledyne		R15																
		R17 MED																
		R22 MED																
		R22CC																
		R23																
		R24																
		No leads	T1/T2															
		With leads	C1R/ C2R															
Vickers Mie	AX 300 / MX 300																	
	TED 60T/191T/200T	T7																
VTI	101272, 100352																	
	103100																	
	100580																	