

Oxygen Sensors for Life Supporting Systems

Use the advantages:

Accurate and reliable response
Resistant to N₂O
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

Measurement Range:	0-100 % oxygen
Accuracy and Repeatability:	< 1 % vol. O ₂ when calibrated at 100 % O ₂
Zero Offset:	< 0,5 % vol. O ₂ in 100% N ₂ , applied 5 minutes
Linearity Error:	< 3 % relative
Cross Interference:	< 0.5 % vol. O ₂ response to: 10 % CO ₂ balance N ₂ 80% N ₂ O balance N ₂ 7.5% Halothane balance N ₂ 7.5 % Isoflurane balance N ₂ 7.5 % Enflurane balance N ₂ 9% Sevoflurane balance N ₂ 20% Desflurane balance N ₂
Influence of Humidity:	- 0.03 % rel. per % RH at 25°C
Influence of Pressure:	proportional to change in oxygen partial pressure
Influence of Mechanical Shock:	< 1% relative after a fall from 1m
Operating Temperature:	0 to 50°C
Temperature Compensation:	built-in NTC compensation (see below)
Effect of Temperature	between +5 °C and +25 °C: 3 % relative error
Compensation (steady state):	between 0 °C and +50 °C: 8 % relative error
Operating Humidity:	0-99 % RH non-condensing
Long Term Output Drift:	< 1 % vol oxygen per month typically < - 15 % relative over lifetime
Storage Temperature:	-20 to +50 °C
Recommended Storage:	+5 to +15 °C
Recommended Load:	≥ 10 kOhms
Warm-Up Time:	< 30 minutes, after replacement of sensor
Weight:	approximately 28 grams approximately 43 grams OOM107 series

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

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

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		MOX-9																	
		MOX-10																	
		MOX-16																	
		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																	

