

# 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 specification

<b>Measurement Range:</b>	0-100 % oxygen
<b>Accuracy and Repeatability:</b>	< 1 % vol. O <sub>2</sub> when calibrated at 100 % O <sub>2</sub>
<b>Zero Offset:</b>	< 0,5 % vol. O <sub>2</sub> in 100% N <sub>2</sub> , applied 5 minutes
<b>Linearity Error:</b>	< 3 % relative
<b>Cross Interference:</b>	< 0.5 % vol. O <sub>2</sub> response to: 10 % CO <sub>2</sub> balance N <sub>2</sub> 80% N <sub>2</sub> O balance N <sub>2</sub> 7.5% Halothane balance N <sub>2</sub> 7.5 % Isoflurane balance N <sub>2</sub> 7.5 % Enflurane balance N <sub>2</sub> 9% Sevoflurane balance N <sub>2</sub> 20% Desflurane balance N <sub>2</sub>
<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

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 <sub>90%</sub>	Nominal Sensor Lifetime	Electrical Interface
<b>E61-660</b>	46µA – 63µA no temperature compensation	< 13 seconds	≥ 500 000 % volume Oxygen hours	Gold plated slip rings
<b>E61-918</b>	9mV – 13mV temperature compensated	< 13 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin Molex® Connector
<b>E61-910</b>	9mV – 13mV temperature compensated	< 13 seconds	≥ 1 000 000 % volume Oxygen hours	3.5mm Mono Jack
<b>E61-907</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	3 pin Molex® Connector
<b>E61-908</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	3.5mm Mono Jack
<b>E61-906</b>	9mV – 13mV temperature compensated	< 5 seconds	≥ 500 000 % volume Oxygen hours	Switchcraft® Mini Power Jack
<b>E61-661</b>	24µA – 32µA no temperature compensation	< 12 seconds	≥ 750 000 % volume Oxygen hours	Gold plated slip rings
<b>E61-914</b>	Teledyne® TED range	< 5 seconds	≥ 500 000 % volume Oxygen hours	Molex® plug 4P4C
<b>E61-913</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin Molex® Connector
<b>E61-912</b>	170µA – 230µA no temperature compensation	< 12 seconds	≥ 250 000 % volume Oxygen hours	Gold plated slip rings
<b>E61-550</b>	170µA – 230µA no temperature compensation	< 12 seconds	≥ 250 000 % volume Oxygen hours	Flying leads with pin-connectors
<b>E61-670</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	Modular Jack 6P4C
<b>E61-927</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3mm Stereo Jack
<b>E61-663</b>	24µA – 32µA (Dual Cathode) no temperature compensation	< 12 seconds	≥ 500 000 % volume Oxygen hours	Gold plated slip rings
<b>E61-840</b>	13mV – 16mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3 pin molex®
<b>E61-570</b>	13mV – 16mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	3,5mm Mono Jack
<b>E61-570-2</b>	9mV – 13mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	flying leads with 3pin female molex® connector
<b>E61-570C</b>	9mV – 11,5mV temperature compensated	< 12 seconds	≥ 1 000 000 % volume Oxygen hours	AMP MATE-N-LOK / 2 circuit

# Oxygen Sensors for Medical Applications



Manufacturer			Westprime Part Number																	
Name	Type	Reference-No.:	E61-660	E61-918	E61-910	E61-907	E61-908	E61-906	E61-661	E61-914	E61-913	E61-912	E61-550	E61-670	E61-927	E61-663	E61-840	E61-570	E61-570-2	E61-570C
Airshields	Isolette C2000																			
		6735142																		
Bio Tek		48351																		
BMD Bio Med Dev.	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																		
		804674																		
	806572																			
Datascope		0600-00-0002																		
Datex-Engström	Erica																			
	Elvira																			
Dräger	Oxycor, 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																		
	Galileo, Raphael, Alladin	HM-12																		
		HM-13																		
		HM-14																		
Hewlett Packard		15201A																		
		5556																		
		5557																		
		5558																		
Hudson		5566																		
		5567																		
		5568																		
		5569																		
Infrasonics		60116																		
Invivo	Magnitude	9445																		
Newport	Wave Ventilator OM100 / OM105																			



E61-927



E61-663



E61-840



E61-570



E61-570-2



E61-570S

Manufacturer			Westprime Part Number																	
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Datex-Ohmeda (GE Medical)	4700 Oxicap, 5100, 5120,5140, 5250, 5250 RGM, 7200, 7800,7810, Excel, Modulus	0237-2034-700																		
	Aestiva, 7900 Monitor, Excel SE	6050-0004-110																		
	Giraffe	6600-1278-600 (6600-0120-850)																		
Puritan Bennett	7280 Monitor, 7200 Ventilator Ventilators 840, 740, 760	4-020933-00 4-072214-00																		
Sechrist	650 / 4370																			
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																			
Teledyne		R15																		
		R17 MED																		
		R22 MED																		
		R22CC																		
		R23																		
		R24																		
		No leads	T1/T2																	
		With leads	C1R/ C2R																	
	AX 300 / MX 300																			
	TED 60T/191T/200T	T7																		
Vickers Mie																				