

# Precision Optical Oxygen Measurement PSC3-OXY Portable Oxygen Analyzer

PSC3-OXY Specifications	
<b>Part Numbers (Ordering Information)</b>	
<b>PSC3-OXY-BOS3-DC</b>	9-24VDC* Operational Power, 4401OXY with FM / CSA Approval, 0 to 300 ppm Range
<b>PSC3-OXY-BOS3-AC</b>	100-240VAC Operational Power, 4401OXY with FM / CSA Approval, 0 to 300 ppm Range
<b>PSC3-OXY-BOS1-DC</b>	9-24VDC* Operational Power, 4401OXY with FM / CSA Approval, 0 to 4.2% Range
<b>PSC3-OXY-BOS1-AC</b>	100-240VAC Operational Power, 4401OXY with FM / CSA Approval, 0 to 4.2% Range
	* Input power must not exceed 24VDC
<b>Input Information</b>	
<b>Sensor Input</b>	(1) O <sub>2</sub> optical input BOS FIBERSENSE sensor, (1) PT1000 input (Part# B1150-1005)
<b>User Adjustable Options</b>	
<b>Units: User Selectable</b>	Gas Phase: % air-saturation, % oxygen, hPa, Torr, ppm. Liquid Phase: hPa, Torr, ppm, ppb, μmol
<b>Calibration</b>	Conventional two-point calibration
<b>Sampling Rate</b>	Programmable from 3 seconds to 1 hour
<b>Environmental (Based on ratings for 4401OXY Analyzer)</b>	
<b>Environmental Rating</b>	NEMA 4X
<b>Operating Temperature</b>	0 to +50°C (32 to 122°F)
<b>Storage Temperature</b>	-10 to +65°C (14 to 149°F)
<b>Max. Operating Relative Humidity</b>	95%
<b>Physical</b>	
<b>Dimensions H x W x D (Inches)</b>	18 x 12 x 17 inches (21.3 x 25.4 x 21.3 cm)
<b>Weight (lb)</b>	28 lb (12.7 kg)

BOS FIBERSENSE Specifications		
	BOS1 - % Level Gas Phase O <sub>2</sub> @ 1atm, 20°C	BOS3 - ppm Level Gas Phase O <sub>2</sub> @ 1atm, 20°C
<b>Measurement Range</b>	0 - 4.2 % O <sub>2</sub> 0 - 41.4 hPa	0 - 300 ppm with over-range of 1000 ppm
<b>Limit of Detection</b>	0.002 % O <sub>2</sub>	0.5 ppm O <sub>2</sub>
<b>Resolution @ 20°C and 1013 hPa</b>	± 0.0007% at 0.002 %O <sub>2</sub> ± 0.007 hPa at 0.023 hPa ± 0.0015% at 0.02%O <sub>2</sub> ± 0.015 hPa at 2.0 hPa	10 ± 0.5 ppm; 100 ± 0.8 ppm; 200 ± 1.5 ppm
<b>Response Time (T<sub>90</sub>)</b>	< 6 sec.	< 3 sec. based on 0 - 300 ppm measurement range
<b>Accuracy @ 20°C</b>	0.002 % O <sub>2</sub> (g), or 3% of the measured value whichever is greater	± 2ppm or ± 5% of measured value whichever is greater (or as partial pressure, +/- 0.002 hPa)
<b>Drift from Photodecomposition</b>	< 2.0 ppb within 30 days (1 min sample rate)	< 2.0 ppm within 30 days (1 min sample rate)
<b>Operating Temperature Range</b>	0 to 50°C (32 to 122°F)	
<b>Allowable Sensor Temperature</b>	90°C (194°F) non-continuous	
<b>Cross Sensitivity for BOS1 &amp; BOS3 Sensors Listed above</b>		
No cross-sensitivity for carbon dioxide (CO <sub>2</sub> ), hydrogen sulfide (H <sub>2</sub> S), ammonia (NH <sub>3</sub> ), gaseous sulfur dioxide (SO <sub>2</sub> ), no cross-sensitivity to pH (1-14), ionic species like sulfide, sulfate or chloride. Usable in methanol, ethanol-water mixtures, and in pure methanol & ethanol. Avoid organic solvents like chloroform, toluene, acetone, and methylene chloride along with any gaseous chlorine (Cl <sub>2</sub> ).		

## Agency Approvals (for 4401OXY Optical Oxygen Analyzer)

Class 3600 - Electrical Equipment for Use in Hazardous (Classified) Locations - General Requirements  
 Class 3611 - Non-Incendive Electrical Equipment for Use in Class I & II Division 2, and Class III, Divisions 1 & 2 Hazardous Locations  
 Class 3810 - Electrical Equipment for Measurement, Control, and Laboratory Use  
 CSA C22.2 No. 142-M1987 (R2004) - PROCESS CONTROL EQUIPMENT - Industrial Products  
 CSA STD C22.2 No. 213-M1987 (R2004) - Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations  
 ANSI/NEMA-250 - Enclosures for Electrical Equipment (1000 Volts Maximum)

