

Certificate no: Oxygen Optode 4831\_474\_207867  
FoilID: 1206EM

Product: Oxygen Optode 4831  
Serial no: 474  
Calibration date: 18.11.2022

## 2-POINT RECALIBRATION, MULTIPOINT CALIBRATED OXYGEN OPTODE

This is to certify that this product has been calibrated and verified using the following reference equipment:

Reference Equipment	Serial
Calibration Bath Model Toho TM-005-P-A	12-K
Fluke 5615 PRT	Serial No. 802054 and Serial No. 849155
Fluke CHUB E-4	Serial No. A7C677
Reference sensor 4330	338

### Specification

	O2 Concentration	Air Saturation	Temperature
Range	0-500 µM	0 - 120%	-5 to +40°C
Accuracy	< ±3µM or ±2% <sup>1)</sup>	±2% <sup>2)</sup>	±0.03°C <sup>3)</sup>
Resolution	< 1 µM	< 0.4%	0.01°C
Settling Time (63%)	< 25 seconds	< 25 seconds	< 2 seconds

1) Requires salinity compensation for salinity variations > 1mS/cm, and pressure compensation for pressure > 100meter

2) Within calibrated range 0 - 120% / 0 - 30°C

3) Within calibrated range 0 - 36°C for standard version and 0 - 30°C for multipoint version

### Calibration points and readings:

	Air Saturated Water	Zero Solution (Na2SO3)
Phase reading (°)	33.98	60.61
Temperature reading (°C)	10.08	20.06
Air Pressure (hPa)	1010.82	

### Giving these coefficients

Index	0 (Offset)	1 (Slope)
ConcCoef	-1.657221E+00	1.044688E+00

### With following settings

Index	0	1	2	3	4	5	6
SVUFoilCoef	2.55647E-03	1.06623E-04	2.27510E-06	2.02954E+02	-2.61210E-01	-5.21914E+01	4.09460E+00
PhaseCoef	0.000000E+00	1.000000E+00	0.000000E+00	0.000000E+00			
TempCoef	2.241054E+01	-3.097322E-02	2.815089E-06	-4.104700E-09	0.000000E+00	0.000000E+00	
Salinity (mS/cm)	0.00						
Firmware Version	5.3.1						

Date:18.11.2022

  
Sr. Repair Technician