

Certificate no: Oxygen Optode 4831\_133\_189562  
FoilID: 1206EM

Product: **Oxygen Optode 4831**  
Serial no: 133  
Calibration date: 26.10.2021

## 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 (°)	32.64	59.26
Temperature reading (°C)	10.03	23.06
Air Pressure (hPa)	968.50	

### Giving these coefficients

Index	0 (Offset)	1 (Slope)
ConcCoef	-4.945391E-01	1.005718E+00

### With following settings

Index	0	1	2	3	4	5	6
SVUFoilCoef	2.56782E-03	1.13324E-04	2.05241E-06	1.95034E+02	-2.22737E-01	-4.64632E+01	3.97907E+00
PhaseCoef	0.000000E+00	1.000000E+00	0.000000E+00	0.000000E+00			
TempCoef	2.422661E+01	-3.080285E-02	2.905873E-06	-4.237522E-09	0.000000E+00	0.000000E+00	
Salinity (mS/cm)	0.00						
Firmware Version	5.3.1						

Date:26.10.2021

  
Sr. Repair Technician