

Certificate no: Oxygen Optode 4831\_733\_177734  
 FoilID: 1517M

Product: **Oxygen Optode 4831**  
 Serial no: 733  
 Calibration date: 15.10.2020

**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 (°)	34.09	61.14
Temperature reading (°C)	10.00	22.44
Air Pressure (hPa)	962.00	

**Giving these coefficients**

Index	0 (Offset)	1 (Slope)
ConcCoef	-3.588431E+00	1.031855E+00

**With following settings**

Index	0	1	2	3	4	5	6
SVUFoilCoef	2.70493E-03	1.19102E-04	2.24028E-06	1.61256E+02	-1.80393E-01	-3.88837E+01	3.17509E+00
PhaseCoef	-4.720000E-01	1.000000E+00	0.000000E+00	0.000000E+00			
TempCoef	2.887533E+01	-3.143761E-02	3.621049E-06	-5.035445E-09	0.000000E+00	0.000000E+00	
Salinity (mS/cm)	0.00						
Firmware Version	5.0.4						

Date:15.10.2020

  
 Sr. Repair Technician