

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0603
CALIBRATION DATE: 08-Dec-16

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 1.4801e-004
Foffset = -3306.58
Tau20 = 9.47

A = -2.0026e-003
B = 1.0080e-004
C = -2.2097e-006
E nominal = 0.036

NOMINAL DYNAMIC COEFFICIENTS
D1 = 1.92634e-4 H1 = -3.300000e-2
D2 = -4.64803e-2 H2 = 5.00000e+3
H3 = 1.45000e+3

BATH OX (ml/l)	BATH TEMP (° C)	BATH SAL (PSU)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
1.22	2.00	0.00	4156.63	1.21	-0.00
1.23	30.00	0.00	4919.65	1.23	-0.00
1.24	26.00	0.00	4815.37	1.24	-0.00
1.25	20.00	0.00	4658.92	1.25	-0.00
1.26	12.00	0.00	4447.17	1.26	-0.00
1.27	6.00	0.00	4298.39	1.27	-0.00
3.96	2.00	0.00	6084.60	3.96	0.01
3.96	6.00	0.00	6414.38	3.97	0.01
3.98	12.00	0.00	6924.89	3.98	0.00
3.99	30.00	0.00	8559.49	3.99	0.01
3.99	26.00	0.00	8168.41	3.99	0.01
3.99	20.00	0.00	7620.71	3.99	0.00
6.67	30.00	0.00	12075.18	6.67	-0.00
6.68	26.00	0.00	11439.73	6.68	0.00
6.69	2.00	0.00	7991.41	6.69	-0.00
6.69	6.00	0.00	8544.48	6.69	-0.00
6.70	20.00	0.00	10538.60	6.69	-0.00
6.70	12.00	0.00	9388.47	6.70	-0.00

F = instrument output (Hz); T = temperature (°C); S = salinity (PSU); K = temperature (°K)

Oxsol(T,S) = oxygen saturation (ml/l); P = pressure (dbar)

Oxygen (ml/l) = Soc * (F + Foffset) * (1.0 + A * T + B * T² + C * T³) * Oxsol(T,S) * exp(E * P / K)

Residual (ml/l) = instrument oxygen - bath oxygen

