

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0603
CALIBRATION DATE: 29-Dec-16

SBE 43I OXYGEN CALIBRATION DATA

COEFFICIENTS:
Soc = 1.5344e-004
Foffset = -3297.13
Tau20 = 4.56

A = -2.5809e-003
B = 8.0898e-005
C = -1.7894e-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)
1.14	2.00	0.00	4071.57	1.14	0.00
1.17	6.00	0.00	4186.87	1.17	0.00
1.19	12.00	0.00	4344.47	1.18	-0.00
1.20	26.00	0.00	4738.63	1.20	-0.00
1.21	30.00	0.00	4864.53	1.20	-0.00
1.22	20.00	0.00	4581.71	1.21	-0.00
3.89	2.00	0.00	5933.29	3.90	0.00
3.90	6.00	0.00	6257.56	3.91	0.00
3.93	12.00	0.00	6770.60	3.93	0.00
3.95	20.00	0.00	7479.74	3.95	-0.00
3.96	26.00	0.00	8055.71	3.96	0.00
3.97	30.00	0.00	8460.52	3.97	0.00
6.65	6.00	0.00	8340.45	6.65	0.00
6.66	26.00	0.00	11295.12	6.66	0.00
6.66	2.00	0.00	7803.80	6.66	-0.00
6.66	12.00	0.00	9187.52	6.66	0.00
6.68	20.00	0.00	10381.19	6.68	-0.00
6.68	30.00	0.00	11992.23	6.68	-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

