

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1069

CALIBRATION DATE: 01-Jul-15

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

TA0 = 7.006421e-004 TA2 = 5.636693e-007

TA1 = 2.518783e-004 TA3 = 1.066324e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT(V)	INST TEMP (° C)	RESIDUAL (° C)
1.9999	1.11811	2.0000	0.00011
2.0000	1.11811	2.0000	0.00001
2.0000	1.11811	2.0000	0.00001
2.0000	1.11811	2.0000	0.00001
6.0000	0.99399	5.9999	-0.00008
6.0000	0.99399	5.9999	-0.00008
6.0000	0.99399	5.9999	-0.00008
6.0000	0.99399	5.9999	-0.00008
12.0000	0.82825	12.0002	0.00018
12.0000	0.82825	12.0002	0.00018
12.0000	0.82825	12.0002	0.00018
12.0001	0.82826	11.9998	-0.00031
20.0000	0.64473	19.9999	-0.00006
20.0000	0.64473	19.9999	-0.00006
20.0000	0.64472	20.0004	0.00043
20.0001	0.64473	19.9999	-0.00016
25.9999	0.53282	26.0001	0.00022
25.9999	0.53282	26.0001	0.00022
25.9999	0.53283	25.9995	-0.00037
26.0000	0.53283	25.9995	-0.00047
30.0000	0.46905	30.0006	0.00058
30.0000	0.46906	29.9999	-0.00009
30.0000	0.46906	29.9999	-0.00009
30.0001	0.46906	29.9999	-0.00019

V = Instrument Output (Volts)

$L = \ln(100000 * V / (3.3 - V))$

Temperature ITS-90 (°C) =  $1 / (TA0 + (TA1 * L) + (TA2 * L^2) + (TA3 * L^3)) - 273.15$

Residual (°C) = instrument temperature - bath temperature

Date, Offset (mdeg C)

● 01-Jul-15 -0.00

