

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0765

CALIBRATION DATE: 22-Sep-15

SBE 63 OXYGEN TEMPERATURE CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

TA0 = 6.842947e-004 TA2 = -1.216445e-007

TA1 = 2.585871e-004 TA3 = 1.246798e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(V)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
2.0000	1.12100	2.0000	0.00002
2.0000	1.12100	2.0000	0.00002
2.0001	1.12100	2.0000	-0.00008
2.0001	1.12100	2.0000	-0.00008
6.0000	0.99600	6.0001	0.00008
6.0000	0.99600	6.0001	0.00008
6.0000	0.99600	6.0001	0.00008
6.0000	0.99600	6.0001	0.00008
11.9999	0.82916	11.9999	0.00000
12.0000	0.82916	11.9999	-0.00010
12.0000	0.82916	11.9999	-0.00010
12.0001	0.82916	11.9999	-0.00020
19.9999	0.64455	20.0000	0.00014
20.0000	0.64455	20.0000	0.00004
20.0000	0.64455	20.0000	0.00004
20.0000	0.64455	20.0000	0.00004
26.0000	0.53211	26.0000	-0.00003
26.0000	0.53211	26.0000	-0.00003
26.0000	0.53211	26.0000	-0.00003
26.0000	0.53211	26.0000	-0.00003
29.9999	0.46810	30.0000	0.00008
29.9999	0.46810	30.0000	0.00008
30.0000	0.46810	30.0000	-0.00002
30.0001	0.46810	30.0000	-0.00012

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

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

Residual = instrument temperature - bath temperature

