

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 7020
CALIBRATION DATE: 07-Feb-14

SBE16plusV2 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

a0 = 1.244836e-003
a1 = 2.772011e-004
a2 = -1.358780e-006
a3 = 1.920476e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	555675.000	1.0000	-0.0000
4.5000	490522.091	4.5000	-0.0000
15.0000	331445.200	15.0000	0.0000
18.5000	289364.545	18.5000	-0.0000
24.0000	232657.700	24.0000	-0.0000
29.0000	189817.800	29.0000	0.0000
32.5000	164077.600	32.5000	-0.0000

$$MV = (n - 524288) / 1.6e+007$$

$$R = (MV * 2.900e+009 + 1.024e+008) / (2.048e+004 - MV * 2.0e+005)$$

$$\text{Temperature ITS-90} = 1 / \{ a_0 + a_1 [\ln(R)] + a_2 [\ln^2(R)] + a_3 [\ln^3(R)] \} - 273.15 \text{ (}^\circ\text{C)}$$

Residual = instrument temperature - bath temperature

