

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 7021  
CALIBRATION DATE: 07-Feb-14

SBE16plusV2 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 1.251793e-003  
a1 = 2.746657e-004  
a2 = -1.151439e-006  
a3 = 1.823542e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	564058.100	1.0000	0.0000
4.5000	498086.455	4.5000	-0.0000
15.0000	336791.800	15.0001	0.0001
18.5000	294083.273	18.4999	-0.0001
24.0000	236508.200	24.0000	0.0000
29.0000	193003.500	29.0000	0.0000
32.5000	166861.200	32.5000	-0.0000

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

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

$$\text{Temperature ITS-90} = 1 / \{ a0 + a1[\ln(R)] + a2[\ln^2(R)] + a3[\ln^3(R)] \} - 273.15 \text{ (}^\circ\text{C)}$$

$$\text{Residual} = \text{instrument temperature} - \text{bath temperature}$$

