

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0021  
CALIBRATION DATE: 15-Dec-12

SBE 48 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -2.002814e-004  
a1 = 3.094219e-004  
a2 = -4.592005e-006  
a3 = 2.101867e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	706645.0	1.0000	0.0000
4.5000	606080.0	4.5000	-0.0000
15.0000	389765.8	15.0000	0.0000
18.5000	338478.8	18.5001	0.0001
24.0001	272756.9	24.0001	-0.0000
29.0000	225491.4	29.0000	-0.0000
32.5000	198009.9	32.5000	0.0000

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

Residual = instrument temperature - bath temperature

