

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0047  
CALIBRATION DATE: 24-Mar-12

SBE 48 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.862878e-005  
a1 = 2.760360e-004  
a2 = -2.615175e-006  
a3 = 1.530262e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	837154.5	1.0000	0.0000
4.5000	714219.4	4.4999	-0.0001
15.0000	452343.5	15.0000	0.0000
18.5000	390902.7	18.5000	0.0000
24.0000	312640.6	24.0000	-0.0000
29.0000	256745.9	28.9999	-0.0001
32.5000	224426.1	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

