

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4139  
CALIBRATION DATE: 29-Jun-12

SBE16plus TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 1.290210e-003

a1 = 2.504298e-004

a2 = 1.235779e-006

a3 = 1.019135e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT(n)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	632655.600	0.9999	-0.0001
4.5000	562041.100	4.5001	0.0001
15.0000	386440.455	14.9998	-0.0002
18.5000	339209.300	18.5002	0.0002
24.0000	275059.200	23.9999	-0.0001
29.0000	226202.000	29.0001	0.0001
32.5000	196689.182	32.4999	-0.0001

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

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

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

Residual = instrument temperature - bath temperature

