

# Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0997  
CALIBRATION DATE: 16-Jul-14

SBE 3 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS:

g = 4.88262588e-003  
h = 6.80874436e-004  
i = 2.76276701e-005  
j = 2.24177956e-006  
f0 = 1000.0

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6598.672	-1.5000	-0.00002
1.0000	6978.561	1.0000	-0.00001
4.5000	7536.523	4.5000	0.00002
8.0000	8125.702	8.0000	0.00000
11.5000	8746.940	11.5001	0.00008
15.0000	9401.010	15.0002	0.00017
18.5000	10088.513	18.4995	-0.00053
22.0000	10810.605	22.0001	0.00007
25.5000	11567.644	25.5002	0.00025
29.0000	12360.310	29.0001	0.00008
32.5000	13189.311	32.4999	-0.00013

Temperature ITS-90 =  $1 / \{ g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)] \} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

