

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: 4341
CALIBRATION DATE: 26-Mar-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.44427767e-003
h = 6.53265665e-004
i = 2.32579063e-005
j = 1.87243402e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121237e-003
b = 6.05170342e-004
c = 1.64577332e-005
d = 1.87396812e-006
f0 = 3372.121

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3372.121	-1.5000	-0.00000
1.0000	3564.806	1.0000	0.00000
4.5000	3847.761	4.5000	0.00001
8.0000	4146.505	8.0000	-0.00000
11.5000	4461.467	11.5000	0.00000
15.0000	4793.063	15.0000	0.00002
18.5000	5141.687	18.5000	-0.00004
22.0000	5507.752	22.0000	0.00001
25.5000	5891.620	25.5000	0.00000
29.0000	6293.667	29.0000	0.00003
32.5000	6714.232	32.5000	-0.00002

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)

Temperature IPTS-68 = $1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$ (°C)

Following the recommendation of JPOTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

