



Sea-Bird Scientific
 13431 NE 20th Street
 Bellevue, WA 98005
 USA

+1 425-643-9866
 seabird@seabird.com
 www.seabird.com

SENSOR SERIAL NUMBER: 3252
 CALIBRATION DATE: 07-Feb-18

SBE 21 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.18492206e-003
 h = 6.14812409e-004
 i = 1.74535985e-005
 j = 9.03664319e-007
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	2448.842	1.0000	0.00005
4.5000	2649.242	4.4999	-0.00010
15.0000	3321.874	15.0001	0.00009
18.4999	3571.041	18.5000	0.00006
24.0000	3989.099	23.9998	-0.00021
29.0000	4398.258	29.0001	0.00015
32.5000	4701.626	32.5000	-0.00004

f = Instrument Output (Hz)

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

$$\text{Residual (°C)} = \text{instrument temperature} - \text{bath temperature}$$

