



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

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

SENSOR SERIAL NUMBER: 3168
 CALIBRATION DATE: 19-Feb-19

SBE 21 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.22257714e-003
 h = 6.25841242e-004
 i = 2.00523490e-005
 j = 1.36780963e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	2573.994	1.0000	-0.00004
4.5000	2782.503	4.5001	0.00007
15.0000	3481.485	15.0000	-0.00004
18.5000	3740.146	18.5000	-0.00003
24.0473	4177.696	24.0473	0.00001
29.0183	4599.462	29.0184	0.00008
32.5000	4912.058	32.4999	-0.00006

f = Instrument Output (Hz)

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

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

