



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

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

SENSOR SERIAL NUMBER: 1164
 CALIBRATION DATE: 14-Jun-21

SBE 3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.77922035e-003
 h = 6.72938970e-004
 i = 3.25305621e-005
 j = 3.26944857e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	5778.787	-1.5001	-0.00015
1.0000	6118.259	1.0001	0.00009
4.5000	6617.567	4.5002	0.00018
8.0000	7145.665	8.0001	0.00010
11.5000	7703.326	11.4999	-0.00011
15.0000	8291.331	14.9998	-0.00021
18.5000	8910.400	18.4998	-0.00017
22.0000	9561.221	22.0000	0.00002
25.5000	10244.421	25.5002	0.00023
29.0000	10960.570	29.0003	0.00026
32.5000	11710.163	32.4997	-0.00026

f = Instrument Output (Hz)

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

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

