



Sea-Bird Scientific  
 13431 NE 20<sup>th</sup> Street  
 Bellevue, WA 98005  
 USA

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

SENSOR SERIAL NUMBER: 3364  
 CALIBRATION DATE: 07-Feb-18

SBE 21 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.20785973e-003  
 h = 6.10292636e-004  
 i = 1.67684641e-005  
 j = 8.31831946e-007  
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	2562.947	1.0000	0.00003
4.5000	2774.474	4.4999	-0.00006
15.0000	3485.200	15.0001	0.00007
18.4999	3748.737	18.4999	0.00002
24.0000	4191.189	23.9999	-0.00014
29.0000	4624.500	29.0001	0.00011
32.5000	4945.958	32.5000	-0.00003

f = Instrument Output (Hz)

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

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

