



Sea-Bird GmbH  
 Postfach 1167  
 87401 Kempten  
 Germany

+49 831 9 60994 701  
 seabird.eu@seabird.com  
 www.seabird.com

SENSOR SERIAL NUMBER: 5146  
 CALIBRATION DATE: 26-May-21

SBE 3 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.36718185e-003  
 h = 6.40663263e-004  
 i = 2.24145081e-005  
 j = 2.12769234e-006  
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	3032.055	-1.5000	0.00001
1.0000	3207.149	1.0000	0.00000
4.5000	3464.399	4.5000	-0.00000
8.0000	3736.147	8.0000	-0.00003
11.5000	4022.786	11.5000	-0.00002
15.0000	4324.696	15.0000	0.00004
18.5000	4642.236	18.5000	0.00005
22.0000	4975.755	22.0000	-0.00003
25.5000	5325.614	25.5000	0.00000
29.0000	5692.120	28.9999	-0.00006
32.5000	6075.613	32.5000	0.00004

f = Instrument Output (Hz)

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

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

