



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

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

SENSOR SERIAL NUMBER: 0313
 CALIBRATION DATE: 27-Feb-21

Glider APL TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.41085397e-003
 h = 6.44326541e-004
 i = 2.56643244e-005
 j = 3.16010688e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
0.9999	3442.206	0.9999	-0.00001
4.4999	3719.106	4.4999	0.00002
14.9999	4644.790	14.9999	0.00003
18.5000	4986.256	18.4999	-0.00006
24.0000	5557.384	24.0000	-0.00001
29.0000	6114.116	29.0001	0.00008
32.5001	6525.550	32.5001	-0.00004

f = Instrument Output (Hz)

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

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

