



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

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

SENSOR SERIAL NUMBER: 1251
CALIBRATION DATE: 10-Sep-21

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 3.175832e-005
a1 = 2.721146e-004
a2 = -1.943731e-006
a3 = 1.487829e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	578630.4	1.0000	0.0000
4.5000	496025.5	4.5000	-0.0000
14.9999	318472.3	15.0000	0.0001
18.5000	276407.5	18.5000	-0.0000
24.0000	222527.9	23.9999	-0.0001
29.0000	183797.9	29.0000	0.0000
32.5000	161291.2	32.5000	-0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1 / \{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

