



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

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

SENSOR SERIAL NUMBER: 4287
CALIBRATION DATE: 02-Apr-23

SBE 16plus TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.270068e-003
a1 = 2.567958e-004
a2 = 6.804132e-007
a3 = 1.207786e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	623713.100	1.0001	0.0001
4.5000	553873.700	4.4999	-0.0001
15.0000	380487.200	15.0000	0.0000
18.5000	333925.300	18.5002	0.0002
24.0000	270720.800	23.9998	-0.0002
28.9999	222607.000	28.9999	-0.0000
32.5000	193547.300	32.5001	0.0001

n = Instrument Output (counts)

$MV = (n - 524288) / 1.6e+007$

$R = (MV * 2.900e+009 + 1.024e+008) / (2.048e+004 - MV * 2.0e+005)$

Temperature ITS-90 (°C) = $1 / \{a0 + a1[\ln(R)] + a2[\ln^2(R)] + a3[\ln^3(R)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

