



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

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

SENSOR SERIAL NUMBER: 7021
CALIBRATION DATE: 14-Jan-21

SBE 16plus V2 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.259775e-003
a1 = 2.716381e-004
a2 = -7.689717e-007
a3 = 1.662311e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
0.9999	564095.100	0.9999	0.0000
4.5000	498115.200	4.5000	-0.0000
15.0000	336809.500	15.0000	0.0000
18.5000	294098.500	18.4999	-0.0001
24.0000	236519.100	24.0002	0.0002
29.0000	193014.800	28.9997	-0.0003
32.5000	166867.300	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

