



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

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

SENSOR SERIAL NUMBER: 4607
CALIBRATION DATE: 10-Mar-18

SBE 16plus TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.133477e-003
a1 = 2.773809e-004
a2 = -1.302029e-006
a3 = 1.923589e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	720728.600	1.0000	0.0000
4.5000	646183.900	4.4999	-0.0001
15.0000	456425.800	15.0002	0.0002
18.5000	404256.700	18.4999	-0.0001
24.0000	332534.200	24.0000	0.0000
28.9999	277221.800	28.9999	-0.0000
32.5000	243492.200	32.5000	0.0000

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

