

# Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 4425

CALIBRATION DATE: 07-Apr-17

SBE 16plus TEMPERATURE CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = 1.243141e-003

a1 = 2.588525e-004

a2 = 1.440152e-007

a3 = 1.378570e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
0.9999	686180.400	1.0000	0.0001
4.5000	611971.700	4.4999	-0.0001
15.0000	425204.000	15.0003	0.0003
18.5000	374463.100	18.4998	-0.0002
24.0000	305182.600	24.0000	-0.0000
29.0000	252168.900	29.0001	0.0001
32.5000	220041.100	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) =  $1 / \{a_0 + a_1[\ln(R)] + a_2[\ln^2(R)] + a_3[\ln^3(R)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

