

# Sea-Bird GmbH

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SENSOR SERIAL NUMBER: 0267

CALIBRATION DATE: 24-Nov-16

SBE 38 TEMPERATURE CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.898997e-005

a1 = 2.760847e-004

a2 = -2.298477e-006

a3 = 1.562444e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5001	747986.4	-1.5000	0.0001
1.0000	668607.1	0.9999	-0.0001
4.5000	573047.1	4.4999	-0.0001
7.9999	492735.7	8.0000	0.0001
11.5000	425012.7	11.5001	0.0001
15.0000	367719.9	15.0000	0.0000
18.5000	319094.2	18.5000	-0.0000
22.0000	277696.7	22.0000	-0.0000
25.5000	242347.9	25.4999	-0.0001
28.9999	212075.1	28.9999	-0.0000
32.4999	186074.5	32.4999	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

