

SBE56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-13400
Instrument Firmware Version: 1.02
Communications Format: RS232

Installed Devices/Sensors

Data Format	Measurement	Sensor Type	Serial Number	Rating
Count	Temperature	Internal	N/A	N/A

Maximum Depth: 1500m

CAUTION - The maximum deployment depth will be limited by the measurement range of the pressure sensor, if installed, an attached sensor, if installed, or the housing.

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SENSOR SERIAL NUMBER: 13400 CALIBRATION DATE: 20-Aug-23

SBE 56 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.282155e-003 a1 = 3.551376e-004 a2 = -7.146041e-006 a3 = 2.118820e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
-1.5000	20409668.3	-1.5000	0.0000
1.0000	18209251.8	0.9999	-0.0001
4.5000	15567114.5	4.5001	0.0001
8.0000	13353168.9	8.0000	0.0000
11.5000	11491493.3	11.4999	-0.0001
15.0000	9920695.8	15.0001	0.0001
18.5000	8591115.8	18.5000	-0.0000
22.0000	7462018.1	22.0000	-0.0000
25.5000	6500226.3	25.5000	0.0000
29.0000	5678476.4	29.0000	0.0000
32.5000	4974319.2	32.5000	-0.0000

n = Instrument Output (counts)

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

Residual (${}^{\circ}C$) = instrument temperature - bath temperature

