

SBE56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-13402
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: 13402 CALIBRATION DATE: 20-Aug-23 SBE 56 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.348687e-003 a1 = 3.596222e-004 a2 = -7.232803e-006 a3 = 2.144869e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
-1.5000	20630123.9	-1.5000	-0.0000
1.0000	18433071.4	1.0000	-0.0000
4.5000	15790553.3	4.5000	0.0000
8.0000	13571867.4	8.0000	0.0000
11.5000	11702577.2	11.5000	-0.0000
15.0000	10122387.3	15.0000	0.0000
18.5000	8782299.5	18.5000	-0.0000
22.0000	7642204.7	22.0000	-0.0000
25.5000	6669270.3	25.5000	0.0000
29.0000	5836534.4	29.0000	0.0000
32.5000	5121722.1	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

