

SBE56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-13403
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: 13403 CALIBRATION DATE: 20-Aug-23 SBE 56 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.348657e-003 a1 = 3.568843e-004 a2 = -6.955019e-006 a3 = 2.093035e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	20091723.3	-1.5000	0.0000
1.0000	17965632.2	1.0000	-0.0000
4.5000	15406290.4	4.5000	-0.0000
8.0000	13255228.4	8.0000	0.0000
11.5000	11441154.6	11.5000	-0.0000
15.0000	9906155.1	15.0000	0.0000
18.5000	8603145.1	18.5000	-0.0000
22.0000	7493522.6	22.0000	0.0000
25.5000	6545734.3	25.5000	0.0000
29.0000	5733764.3	29.0000	-0.0000
32.5000	5036115.3	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

