

SBE56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-13393
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: 13393 CALIBRATION DATE: 20-Aug-23 SBE 56 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.332008e-003 a1 = 3.554179e-004 a2 = -6.936808e-006 a3 = 2.096394e-007

BATH TEMP	INSTRUMENT	INST TEMP	RESIDUAL
(° C)	OUTPUT (counts)	(° C)	(° C)
-1.5000	20176480.7	-1.5000	0.0000
1.0000	18037750.6	1.0000	-0.0000
4.5000	15463717.4	4.5000	0.0000
8.0000	13300824.2	8.0000	0.0000
11.5000	11477198.2	11.5000	-0.0000
15.0000	9934493.7	15.0000	0.0000
18.5000	8625238.3	18.5000	-0.0000
22.0000	7510608.0	22.0000	-0.0000
25.5000	6558736.3	25.5000	0.0000
29.0000	5743489.1	29.0000	-0.0000
32.5000	5043199.1	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

