

SBE56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-13413
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.

Sea-Bird Scientific 13431 NE 20th Street Bellevue, WA 98005 USA +1 425-643-9866 seabird@seabird.com www.seabird.com

SENSOR SERIAL NUMBER: 13413 CALIBRATION DATE: 20-Aug-23 SBE 56 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.279709e-003 a1 = 3.473806e-004 a2 = -6.472758e-006 a3 = 1.989778e-007

| BATH TEMP | INSTRUMENT | INST TEMP | RESIDUAL |
|-----------|-----------------|-----------|----------|
| (° C) | OUTPUT (counts) | (° C) | (° C) |
| -1.5000 | 20335067.1 | -1.5000 | -0.0000 |
| 1.0000 | 18169849.1 | 1.0000 | 0.0000 |
| 4.5000 | 15565668.3 | 4.5000 | 0.0000 |
| 8.0000 | 13379104.8 | 8.0000 | -0.0000 |
| 11.5000 | 11536799.7 | 11.5000 | -0.0000 |
| 15.0000 | 9979386.9 | 15.0001 | 0.0001 |
| 18.5000 | 8658592.1 | 18.5000 | -0.0000 |
| 22.0000 | 7534842.4 | 22.0000 | -0.0000 |
| 25.5000 | 6575825.5 | 25.5000 | -0.0000 |
| 29.0000 | 5754935.9 | 29.0000 | 0.0000 |
| 32.5000 | 5050257.5 | 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 (°C) = instrument temperature - bath temperature

