



**SEA-BIRD**  
SCIENTIFIC

## SBE56 ECO Temperature Logger

### Instrument Configuration

Instrument Serial Number: 56-13399  
Instrument Firmware Version: 1.02  
Communications Format: RS232

### Installed Devices/Sensors

| <i>Data Format</i> | <i>Measurement</i> | <i>Sensor Type</i> | <i>Serial Number</i> | <i>Rating</i> |
|--------------------|--------------------|--------------------|----------------------|---------------|
| 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: 13399  
CALIBRATION DATE: 20-Aug-23

SBE 56 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.301714e-003  
a1 = 3.502383e-004  
a2 = -6.597251e-006  
a3 = 2.009812e-007

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (counts) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| -1.5000            | 20309298.2                    | -1.5000            | 0.0000            |
| 1.0000             | 18149379.9                    | 0.9999             | -0.0001           |
| 4.5000             | 15551094.0                    | 4.5000             | 0.0000            |
| 8.0000             | 13369136.5                    | 8.0000             | 0.0000            |
| 11.5000            | 11530540.3                    | 11.4999            | -0.0001           |
| 15.0000            | 9975875.4                     | 15.0001            | 0.0001            |
| 18.5000            | 8657293.2                     | 18.4999            | -0.0001           |
| 22.0000            | 7535179.8                     | 22.0000            | 0.0000            |
| 25.5000            | 6577431.9                     | 25.5000            | 0.0000            |
| 29.0000            | 5757498.2                     | 29.0000            | 0.0000            |
| 32.5000            | 5053515.0                     | 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

