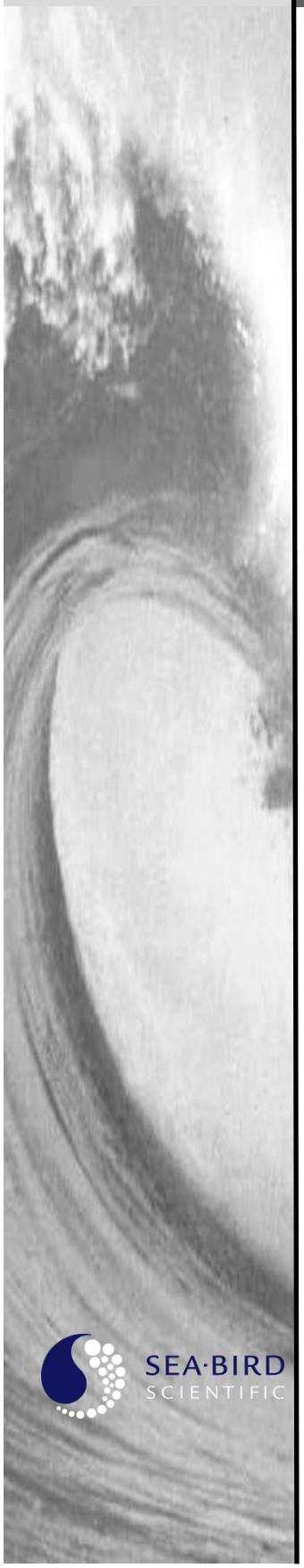
Sea-Bird Electronics, Inc.

Advancing the Science of Ocean Measurement



SBE 56 ECO Temperature Logger

Instrument Configuration

Instrument Serial Number: 56-04738
Instrument Firmware Version: 0.96
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

Support Telephone: (+1)425-643-9866
Support Email: seabird@seabird.com

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 04738
CALIBRATION DATE: 09-Aug-14

SBE 56 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

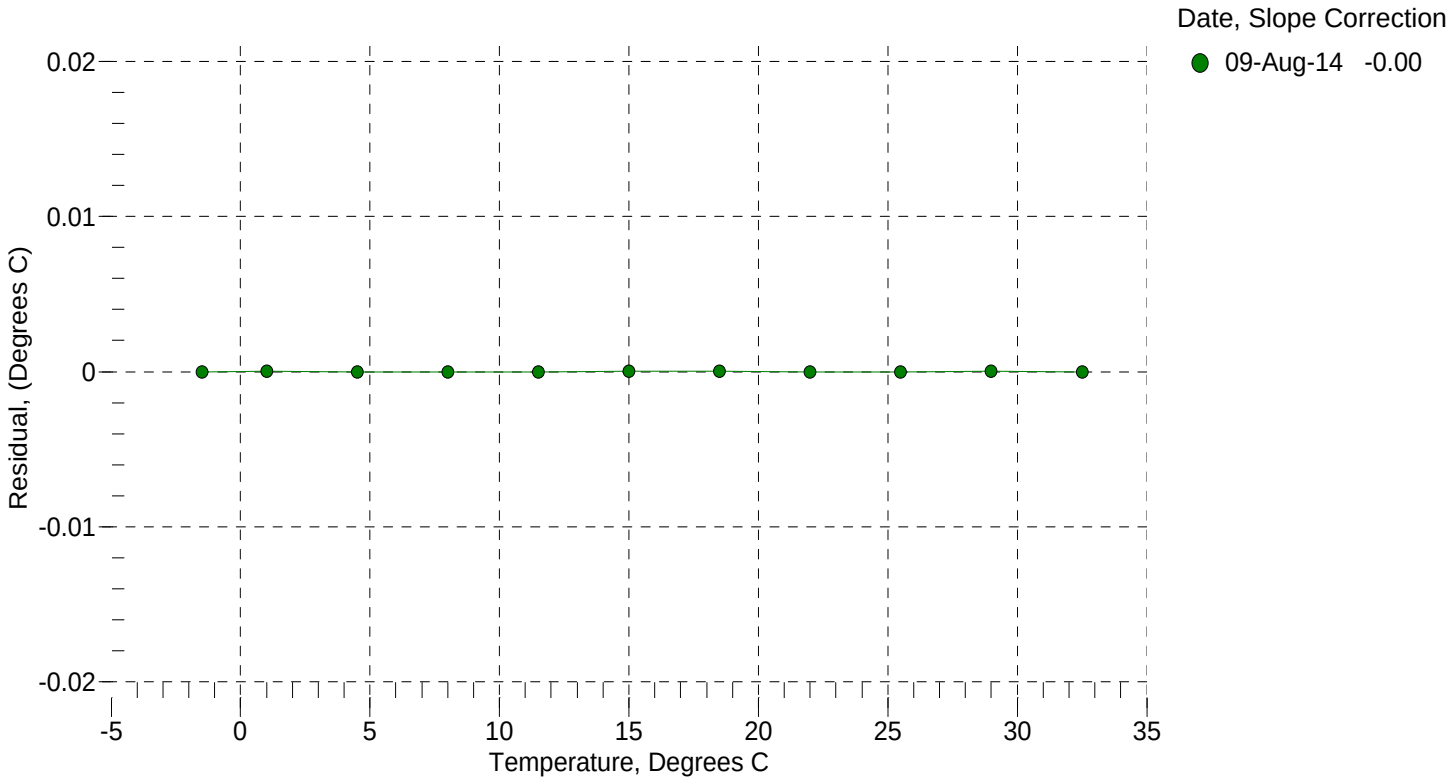
```
a0 = -1.167401e-003
a1 =  3.368812e-004
a2 = -6.158219e-006
a3 =  1.923959e-007
```

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	20802961.2	-1.5000	-0.0000
1.0000	18549691.3	1.0000	0.0000
4.5000	15845981.7	4.5000	-0.0000
8.0000	13581887.4	8.0000	-0.0000
11.5000	11679384.5	11.5000	-0.0000
15.0000	10075259.3	15.0000	0.0000
18.5000	8718347.0	18.5000	0.0000
22.0000	7566834.9	22.0000	-0.0000
25.5000	6586577.8	25.5000	-0.0000
29.0000	5749583.8	29.0000	0.0000
32.5000	5032829.1	32.5000	-0.0000

Temperature ITS-90 = $1/\{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]\} - 273.15$ (°C)

Residual = instrument temperature - bath temperature

n = instrument output



Sea-Bird Electronics, Inc.
13431 NE 20th St. Bellevue, Washington 98005 USA
www.seabird.com
Phone: (425) 643-9866
Fax: (425) 643-9954
Email: seabird@seabird.com

Pressure Test Certificate

Test Date: 08/04/14

Description: SBE-56 Temperature Sensor

Sensor Information:

Model Number: 56

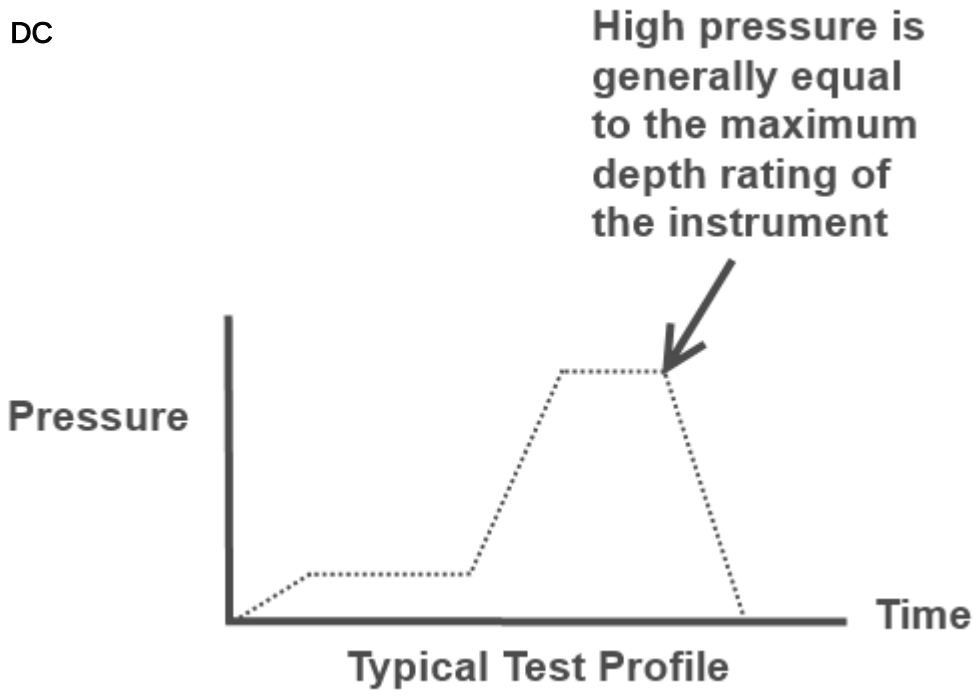
Serial Number: 04738

Pressure Test Protocol:

Low Pressure Test:	40	PSI	Held For:	15	Minutes
High Pressure Test:	2300	PSI	Held For:	15	Minutes

Passed Test: Yes

Tested By: DC



Typical Test Profile