

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1805

CALIBRATION DATE: 27-Jun-12

SBE 39 PRESSURE CALIBRATION DATA

508 psia S/N 4713

## COEFFICIENTS:

PA0 = 1.351285e-001

PA1 = 2.416039e-002

PA2 = 1.040167e-009

PTHA0 = -9.286227e+001

PTHA1 = 4.437171e-002

PTHA2 = -2.514907e-007

PTCA0 = 7.323934e+001

PTCA1 = 3.795348e-001

PTCA2 = -6.150259e-003

PTCB0 = 2.504188e+001

PTCB1 = 1.175000e-003

PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.63	672.1	2665.0	14.45	-0.04
104.87	4416.1	2666.0	104.83	-0.01
204.89	8559.2	2664.0	204.87	-0.00
304.90	12699.4	2663.0	304.88	-0.00
404.88	16837.9	2663.0	404.89	0.00
504.88	20973.8	2661.0	504.87	-0.00
404.90	16838.7	2661.0	404.91	0.00
304.91	12701.3	2660.0	304.93	0.00
204.87	8561.7	2658.0	204.94	0.01
104.92	4416.9	2658.0	104.85	-0.01
14.63	672.1	1659.0	14.86	0.05

## THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	2083.60	677.40
4.50	2222.20	679.20
11.50	2384.00	681.27
18.50	2546.60	682.78
25.50	2709.10	683.63
32.50	2872.10	683.41

TEMP (ITS90)	SPAN (mV)
-5.00	25.04
35.00	25.08

$y = \text{thermistor output}; t = P_{\text{TEMPA0}} + P_{\text{TEMPA1}} * y + P_{\text{TEMPA2}} * y^2$

$x = \text{pressure output} - P_{\text{TCA0}} - P_{\text{TCA1}} * t - P_{\text{TCA2}} * t^2$

$n = x * P_{\text{TCB0}} / (P_{\text{TCB0}} + P_{\text{TCB1}} * t + P_{\text{TCB2}} * t^2)$

$\text{pressure (psia)} = P_{\text{A0}} + P_{\text{A1}} * n + P_{\text{A2}} * n^2$

Date, Avg Delta P %FS

27-Jun-12 -0.00

