

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1805  
CALIBRATION DATE: 19-Aug-11

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 4713

## COEFFICIENTS:

PA0 = 1.444309e-001  
PA1 = 2.412661e-002  
PA2 = 1.520496e-009  
PTHA0 = -9.304532e+001  
PTHA1 = 4.449807e-002  
PTHA2 = -2.771447e-007

PTCA0 = 6.611281e+001  
PTCA1 = 3.986127e-001  
PTCA2 = -6.123900e-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	673.6	2665.0	14.64	0.00
104.87	4416.0	2673.0	104.86	-0.00
204.91	8563.5	2674.0	204.89	-0.00
304.88	12707.0	2674.0	304.88	0.00
404.87	16848.8	2673.0	404.88	0.00
504.87	20987.1	2674.0	504.85	-0.00
404.88	16849.5	2672.0	404.90	0.00
304.90	12708.2	2673.0	304.91	0.00
204.93	8564.6	2672.0	204.92	-0.00
104.93	4418.9	2671.0	104.93	0.00
14.63	673.5	2674.0	14.64	0.00

## THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	2084.30	678.30
4.50	2222.80	680.35
11.50	2385.00	682.57
18.50	2547.20	684.18
25.50	2709.90	684.90
32.50	2872.80	685.23

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

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

$x = \text{pressure output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$

$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$

$\text{pressure (psia)} = PA0 + PA1 * n + PA2 * n^2$

Date, Avg Delta P %FS

19-Aug-11 0.00

