

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0277  
CALIBRATION DATE: 08-Jan-13

SBE 49 PRESSURE CALIBRATION DATA  
508 psia S/N 3638435

## COEFFICIENTS:

PA0 = 1.029576e-001  
PA1 = 1.550819e-003  
PA2 = 8.080206e-012  
PTEMPA0 = -5.771557e+001  
PTEMPA1 = 5.778161e+001  
PTEMPA2 = -1.066359e+000

PTCA0 = 5.252991e+005  
PTCA1 = 5.540914e+000  
PTCA2 = -1.153554e-001  
PTCB0 = 2.503538e+001  
PTCB1 = 7.500000e-005  
PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.58	534695.0	1.4	14.57	-0.00
104.87	592910.0	1.4	104.88	0.00
204.88	657322.0	1.4	204.87	-0.00
304.87	721702.0	1.4	304.88	0.00
404.88	786035.0	1.4	404.87	-0.00
504.88	850334.0	1.4	504.89	0.00
404.89	786040.0	1.4	404.88	-0.00
304.88	721706.0	1.4	304.88	-0.00
204.89	657330.0	1.4	204.88	-0.00
104.88	592910.0	1.4	104.88	0.00
14.57	534695.0	1.4	14.57	0.00

## THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	1.61	535544.00
29.00	1.54	535546.21
24.00	1.45	535552.23
18.50	1.35	535547.82
15.00	1.29	535542.30
4.50	1.10	535506.10
1.00	1.04	535490.86

  

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

$$y = \text{thermistor output}; t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

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

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

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

Date, Avg Delta P %FS

08-Jan-13 0.00

