

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0990  
CALIBRATION DATE: 25-Nov-15

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 1256

## COEFFICIENTS:

PA0 =	3.886610e-002	PTCA0 =	1.580419e+001
PA1 =	2.407991e-002	PTCA1 =	2.165283e-001
PA2 =	1.835399e-009	PTCA2 =	-6.621847e-003
PTHA0 =	-6.600558e+001	PTCB0 =	2.501713e+001
PTHA1 =	4.942051e-002	PTCB1 =	-1.775000e-003
PTHA2 =	7.262032e-009	PTCB2 =	0.000000e+000

## PRESSURE SPAN CALIBRATION

## THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (counts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (counts)	INSTRUMENT OUTPUT (counts)
14.74	627.2	1765.0	14.75	0.00	-1.50	1305.00	636.10
105.01	4367.5	1768.0	104.98	-0.00	1.00	1355.60	636.38
205.01	8509.9	1769.0	204.98	-0.01	4.50	1426.30	636.85
305.02	12650.6	1769.0	305.00	-0.00	8.00	1497.10	637.51
405.03	16788.0	1770.0	405.01	-0.00	11.50	1567.90	637.96
505.04	20923.3	1770.0	505.02	-0.00	15.00	1638.80	638.00
405.03	16790.4	1770.0	405.07	0.01	18.50	1709.40	637.97
305.03	12652.8	1771.0	305.06	0.01	22.00	1780.30	637.91
205.03	8512.3	1771.0	205.04	0.00	25.50	1851.20	637.51
105.02	4369.5	1771.0	105.03	0.00	29.00	1921.80	636.91
14.74	627.5	1772.0	14.75	0.00	32.50	1992.60	636.24

TEMPERATURE (°C)	SPAN (mV)
-5.00	25.03
35.00	24.95

y = thermistor output (counts)

$$t = PTHA0 + PTHA1 * y + PTHA2 * y^2$$

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

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

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

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

Date, Offset (%FSR)

● 25-Nov-15 -0.00

