

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1636  
CALIBRATION DATE: 25-Nov-15

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 5635

## COEFFICIENTS:

PA0 =	-1.245930e-002	PTCA0 =	-2.724692e+001
PA1 =	2.406700e-002	PTCA1 =	1.022181e-001
PA2 =	1.436077e-009	PTCA2 =	-5.860171e-003
PTHA0 =	-8.783952e+001	PTCB0 =	2.496113e+001
PTHA1 =	4.589302e-002	PTCB1 =	-1.575000e-003
PTHA2 =	-3.482088e-007	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)
14.75	585.1	2428.0	14.76	0.00	-1.50	1909.00	595.60
105.03	4328.5	2435.0	105.00	-0.00	1.00	1965.10	595.58
205.03	8475.3	2436.0	205.02	-0.00	4.50	2043.70	595.95
305.04	12619.6	2437.0	305.03	-0.00	8.00	2122.60	596.21
405.04	16761.9	2437.0	405.03	-0.00	11.50	2201.30	596.16
505.05	20902.0	2437.0	505.03	-0.00	15.00	2280.20	595.90
405.04	16763.5	2438.0	405.07	0.01	18.50	2359.30	595.47
305.05	12621.2	2438.0	305.06	0.00	22.00	2438.60	594.81
205.04	8476.3	2438.0	205.04	0.00	25.50	2517.80	594.81
105.03	4329.9	2438.0	105.04	0.00	29.00	2597.20	593.51
14.75	584.8	2439.0	14.75	0.00	32.50	2676.40	592.84

TEMPERATURE (°C)	SPAN (mV)
-5.00	24.97
35.00	24.91

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

