

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0992  
CALIBRATION DATE: 25-Nov-15

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 1345

## COEFFICIENTS:

PA0 =	1.374140e+000	PTCA0 =	-3.407050e+000
PA1 =	2.409012e-002	PTCA1 =	3.609744e+000
PA2 =	1.747798e-009	PTCA2 =	-4.446806e-002
PTHA0 =	-6.215146e+001	PTCB0 =	2.499963e+001
PTHA1 =	5.103617e-002	PTCB1 =	-6.750000e-004
PTHA2 =	-8.432632e-008	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	608.5	1643.0	14.75	0.00	-1.50	1190.70	553.50
105.01	4350.7	1645.0	104.98	-0.01	1.00	1240.00	570.28
205.01	8495.5	1647.0	204.98	-0.01	4.50	1308.70	585.45
305.02	12639.0	1647.0	305.00	-0.00	8.00	1377.80	594.61
405.03	16779.1	1647.0	405.01	-0.00	11.50	1446.60	601.16
505.04	20917.1	1648.0	505.02	-0.00	15.00	1515.40	607.50
405.03	16781.4	1648.0	405.06	0.01	18.50	1584.40	614.37
305.03	12641.1	1649.0	305.05	0.00	22.00	1653.40	620.51
205.03	8498.6	1649.0	205.05	0.00	25.50	1722.50	626.31
105.02	4353.4	1648.0	105.04	0.00	29.00	1791.10	632.31
14.74	609.1	1652.0	14.75	0.00	32.50	1860.40	638.14

TEMPERATURE (°C)	SPAN (mV)
-5.00	25.00
35.00	24.98

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

