

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4078  
CALIBRATION DATE: 16-Nov-15

SBE 37 PRESSURE CALIBRATION DATA  
1450 psia S/N 7440

## COEFFICIENTS:

PA0 =	1.852486e-001	PTCA0 =	-2.148395e+002
PA1 =	6.863752e-002	PTCA1 =	1.856008e-001
PA2 =	-5.587636e-009	PTCA2 =	-2.770100e-003
		PTCB0 =	2.481450e+001
		PTCB1 =	1.000000e-004
		PTCB2 =	0.000000e+000

## PRESSURE SPAN CALIBRATION

## THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	TEMPERATURE (°C)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	INSTRUMENT OUTPUT (counts)
14.67	-0.7	21.3	14.70	0.00	32.50	12.58
301.45	4178.0	21.6	301.38	-0.00	29.00	12.54
588.36	8363.2	21.6	588.31	-0.00	24.00	12.38
875.38	12552.0	21.6	875.30	-0.01	18.50	11.90
1162.48	16747.1	21.7	1162.52	0.00	15.00	11.59
1449.48	20940.4	21.7	1449.41	-0.00	4.50	10.44
1162.54	16748.5	21.7	1162.61	0.00	1.00	9.54
875.50	12556.3	21.7	875.59	0.01		
588.55	8367.2	21.8	588.58	0.00		
301.46	4178.7	22.5	301.42	-0.00		
14.64	-0.9	22.6	14.68	0.00		

TEMPERATURE (°C)	SPAN (mV)
-5.00	24.81
35.00	24.82

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

$$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$$

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

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

