

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2357
CALIBRATION DATE: 28-Sep-16

SBE 37 PRESSURE CALIBRATION DATA
1450 psia S/N 1455

COEFFICIENTS:

PA0 =	-2.816342e+000	PTCA0 =	-1.998197e+002
PA1 =	6.871802e-002	PTCA1 =	-1.660998e+000
PA2 =	-4.718614e-009	PTCA2 =	-5.650737e-003
		PTCB0 =	2.487500e+001
		PTCB1 =	4.000000e-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)
14.66	13.9	22.9	14.68	0.00	32.50	3.29
301.29	4187.5	23.1	301.31	0.00	29.00	10.71
588.33	8369.1	23.1	588.29	-0.00	24.00	20.77
875.34	12554.2	23.1	875.36	0.00	18.50	30.64
1162.34	16740.6	23.1	1162.35	0.00	15.00	37.13
1449.35	20929.6	23.1	1449.35	-0.00	4.50	55.81
1162.38	16741.0	23.2	1162.39	0.00	1.00	61.94
875.34	12553.8	23.1	875.33	-0.00		
588.45	8375.0	23.2	588.71	0.02	TEMPERATURE (°C) SPAN (mV)	
301.39	4188.2	23.4	301.40	0.00		
14.66	12.2	23.4	14.63	-0.00		
					35.00	24.89

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

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

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

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

