

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3722
CALIBRATION DATE: 28-Nov-16

SBE 37 PRESSURE CALIBRATION DATA
10153 psia S/N 6174

COEFFICIENTS:

PA0 = 7.984501e-001
PA1 = 4.916872e-001
PA2 = -4.891780e-007

PTCA0 = -2.084205e+001
PTCA1 = -6.487291e-002
PTCA2 = 6.306513e-003
PTCB0 = 2.458963e+001
PTCB1 = 9.250000e-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)
14.54	9.9	22.0	15.10	0.01	32.50	12.95
2001.16	4067.1	22.0	2000.17	-0.01	29.00	11.90
3987.87	8161.5	22.0	3987.14	-0.01	24.00	10.58
5976.48	12294.6	22.0	5976.29	-0.00	18.50	9.38
7962.51	16457.3	22.1	7962.77	0.00	15.00	8.82
9949.89	20655.7	22.1	9949.18	-0.01	4.50	8.33
7961.40	16454.8	22.1	7961.58	0.00	1.00	8.36
5973.38	12292.9	22.1	5975.44	0.02		
3987.57	8161.7	22.1	3987.21	-0.00	TEMPERATURE (°C)	SPAN (mV)
2000.76	4067.0	22.3	2000.08	-0.01	-5.00	24.59
14.55	10.0	22.2	15.13	0.01	35.00	24.62

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

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

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

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

