

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3936

CALIBRATION DATE: 18-Sep-15

SBE 37 PRESSURE CALIBRATION DATA

FSR: 10153 psia S/N 7325

COEFFICIENTS:

PA0 = 1.878014e+000

PA1 = 4.883194e-001

PA2 = -4.646444e-007

PTCA0 = -1.251911e+001

PTCA1 = 2.871703e-001

PTCA2 = -5.201866e-003

PTCB0 = 2.482850e+001

PTCB1 = 7.000000e-004

PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	TEMP ITS90	COMPUTED PRESSURE	ERROR %FS
14.67	18.3	22.9	15.04	0.00
2014.84	4131.3	23.0	2014.24	-0.01
4014.87	8279.0	23.0	4014.41	-0.00
6015.21	12461.3	23.1	6015.08	-0.00
8015.02	16677.4	23.1	8015.50	0.00
10014.66	20924.3	23.1	10013.86	-0.01
8015.06	16678.2	23.1	8015.88	0.01
6015.23	12462.4	23.1	6015.61	0.00
4014.97	8280.1	23.2	4014.91	-0.00
2014.95	4132.1	23.1	2014.62	-0.00
14.67	18.2	23.2	14.98	0.00

THERMAL CORRECTION

TEMP ITS90	INST OUTPUT
32.50	19.34
29.00	19.51
24.00	19.44
18.50	19.07
15.00	18.62
4.50	16.74
1.00	15.80
TEMP (ITS90)	SPAN (mV)
-5.00	24.82
35.00	24.85

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

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

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

