

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0817

CALIBRATION DATE: 11-Sep-14

SBE 37 PRESSURE CALIBRATION DATA

FSR: 1500 psia S/N 192113

COEFFICIENTS:

PA0 = -2.395345e-001

PA1 = 6.009079e-002

PA2 = 2.073592e-008

PTCA0 = -3.886209e+000

PTCA1 = -2.460739e-001

PTCA2 = 3.185559e-003

PTCB0 = 3.005400e+001

PTCB1 = -5.666667e-004

PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	TEMP ITS90	COMPUTED PRESSURE	ERROR %FS
14.74	240.2	23.1	14.68	-0.00
315.13	5209.7	23.1	313.99	-0.08
615.12	10175.1	23.1	614.08	-0.07
915.13	15129.0	23.1	914.50	-0.04
1215.17	20063.6	23.1	1214.76	-0.03
1515.08	24981.0	23.1	1514.98	-0.01
1215.13	20077.1	23.1	1215.58	0.03
915.14	15154.7	23.0	916.06	0.06
615.12	10208.5	23.0	616.10	0.07
315.16	5241.5	23.2	315.91	0.05
14.75	246.3	23.3	15.04	0.02

THERMAL CORRECTION

TEMP ITS90	INST OUTPUT
32.50	250.20
29.00	250.88
24.00	251.12
18.50	251.55
15.00	251.75
4.50	254.39
1.00	254.61
TEMP (ITS90)	SPAN (mV)
0.00	30.05
30.00	30.04

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

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

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

