

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2333
CALIBRATION DATE: 18-Nov-15

SBE 37 PRESSURE CALIBRATION DATA
1450 psia S/N 1207

COEFFICIENTS:

PA0 =	-1.034424e-001	PTCA0 =	-1.806698e+002
PA1 =	6.860396e-002	PTCA1 =	1.140488e-001
PA2 =	-5.232683e-009	PTCA2 =	-8.402951e-003
		PTCB0 =	2.499438e+001
		PTCB1 =	-1.250000e-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)
14.73	34.2	21.8	14.74	0.00	32.50	41.97
301.46	4213.9	21.9	301.42	-0.00	29.00	43.47
588.44	8399.5	21.9	588.31	-0.01	24.00	45.31
875.61	12591.8	21.9	875.49	-0.01	18.50	46.48
1162.62	16786.8	21.9	1162.66	0.00	15.00	46.87
1449.67	20981.2	21.9	1449.60	-0.00	4.50	47.54
1162.61	16787.1	22.0	1162.68	0.01	1.00	47.38
875.59	12595.1	22.0	875.71	0.01		
588.51	8403.4	22.0	588.58	0.01		
301.44	4214.0	22.7	301.44	0.00	TEMPERATURE (°C)	SPAN (mV)
14.74	34.3	22.8	14.77	0.00	-5.00	25.00
					35.00	24.99

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

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

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

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

