

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3762  
CALIBRATION DATE: 18-Nov-15

SBE 37 PRESSURE CALIBRATION DATA  
1450 psia S/N 5751

## COEFFICIENTS:

PA0 =	2.448585e-001	PTCA0 =	-1.901631e+002
PA1 =	6.735733e-002	PTCA1 =	1.135341e-001
PA2 =	-4.614848e-009	PTCA2 =	2.395143e-003
		PTCB0 =	2.540563e+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	28.9	21.9	14.75	0.00	32.50	43.28
301.46	4286.5	22.0	301.41	-0.00	29.00	42.79
588.44	8549.7	22.0	588.28	-0.01	24.00	41.62
875.61	12820.7	22.0	875.50	-0.01	18.50	39.89
1162.62	17093.6	22.0	1162.68	0.00	15.00	39.46
1449.67	21364.9	22.0	1449.59	-0.01	4.50	37.97
1162.61	17093.6	22.0	1162.68	0.01	1.00	37.32
875.59	12823.6	22.0	875.70	0.01		
588.51	8554.8	22.0	588.62	0.01		
301.44	4287.0	22.7	301.43	-0.00	TEMPERATURE (°C)	SPAN (mV)
14.74	29.3	22.8	14.77	0.00	-5.00	25.41
					35.00	25.41

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

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

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

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

