

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0211
CALIBRATION DATE: 31-Oct-14

UCTD PRESSURE CALIBRATION DATA
FSR: 2900 psia S/N 2152946

COEFFICIENTS:

PA0 = -1.934155e+000
PA1 = 8.821550e-003
PA2 = 7.649262e-011
PTempa0 = -9.070354e+001
PTempa1 = 3.734431e-002
PTempa2 = 9.164764e-007

PTCA0 = 5.231143e+005
PTCA1 = -1.945385e+001
PTCA2 = 4.230114e-001
PTCB0 = 1.036966e+002
PTCB1 = -5.313834e-003
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.46	524751.0	2847.0	14.50	0.00
614.68	592652.0	2852.0	614.58	-0.00
1214.66	660463.0	2852.0	1214.57	-0.00
1714.62	716916.0	2853.0	1714.60	-0.00
2314.53	784584.0	2854.0	2314.62	0.00
2914.49	852142.0	2854.0	2914.36	-0.00
2314.51	784585.0	2854.0	2314.63	0.00
1714.58	716921.0	2854.0	1714.65	0.00
1214.68	660470.0	2853.0	1214.63	-0.00
614.66	592664.0	2853.0	614.68	0.00
14.48	524754.0	2855.0	14.52	0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	3068.00	524951.40
29.00	2986.50	524925.85
24.00	2869.70	524913.07
18.50	2740.20	524921.59
15.00	2656.80	524940.72
4.50	2407.20	525053.23
1.00	2323.20	525119.47
TEMP(ITS90)		SPAN(mV)
-4.31		103.72
36.92		103.50

$y = \text{thermistor output}; t = \text{PTempa0} + \text{PTempa1} * y + \text{PTempa2} * y^2$

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

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

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

