

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 9324
CALIBRATION DATE: 05-Nov-15

Slocum Payload CTD PRESSURE CALIBRATION DATA
FSR: 1450 psia S/N 4417960

COEFFICIENTS:

PA0 =	2.713183e-001	PTCA0 =	5.252645e+005
PA1 =	4.636732e-003	PTCA1 =	1.676431e+000
PA2 =	-2.241107e-011	PTCA2 =	3.718207e-002
PTEMPA0 =	1.626549e+002	PTCB0 =	2.537750e+001
PTEMPA1 =	-6.250880e-002	PTCB1 =	-1.000000e-004
PTEMPA2 =	-4.583869e-007	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.67	528440.0	2201.0	14.73	0.00
314.99	593198.0	2193.0	314.91	-0.01
615.00	657944.0	2195.0	614.86	-0.01
914.93	722736.0	2190.0	914.83	-0.01
1214.90	787587.0	2188.0	1214.88	-0.00
1464.96	841648.0	2187.0	1464.87	-0.01
1214.75	787587.0	2186.0	1214.88	0.01
914.74	722757.0	2192.0	914.92	0.01
614.87	657957.0	2190.0	614.91	0.00
314.92	593199.0	2192.0	314.91	-0.00
14.68	528434.0	2190.0	14.69	0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2051	528503.50
29.00	2106	528492.90
24.00	2183	528459.80
18.50	2269	528431.00
15.00	2322	528467.70
4.50	2485	528414.80
1.00	2539	528406.90

TEMP (ITS90)	SPAN (mV)
-5.00	25.38
35.00	25.37

$y = \text{thermistor output}; t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$
 $x = \text{pressure output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$
 $n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$
 $\text{pressure (psia)} = PA0 + PA1 * n + PA2 * n^2$

