

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1624
CALIBRATION DATE: 06-Oct-16

SBE 39 PRESSURE CALIBRATION DATA
508 psia S/N 5503

COEFFICIENTS:

PA0 =	5.754372e-002	PTCA0 =	2.501074e+001
PA1 =	2.400433e-002	PTCA1 =	3.317062e-001
PA2 =	1.145101e-009	PTCA2 =	-9.868455e-003
PTHA0 =	-8.929769e+001	PTCB0 =	2.507613e+001
PTHA1 =	4.577060e-002	PTCB1 =	-1.750000e-004
PTHA2 =	-3.316337e-007	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (counts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (counts)	INSTRUMENT OUTPUT (counts)
14.66	635.9	2501.0	14.67	0.00	-1.50	1945.80	643.90
105.01	4395.8	2503.0	104.96	-0.01	1.00	2001.90	644.57
205.01	8559.5	2504.0	204.98	-0.01	4.50	2080.40	645.54
305.01	12721.6	2504.0	305.01	0.00	8.00	2159.40	646.32
405.01	16880.8	2505.0	405.00	-0.00	11.50	2238.70	646.87
505.01	21037.5	2505.0	504.98	-0.01	15.00	2317.70	647.09
405.01	16882.1	2504.0	405.03	0.01	18.50	2396.70	646.88
305.01	12723.7	2504.0	305.06	0.01	22.00	2476.20	646.92
205.02	8561.5	2504.0	205.03	0.00	25.50	2555.40	646.39
105.02	4397.2	2504.0	104.99	-0.01	29.00	2635.00	645.89
14.66	636.4	2603.0	14.70	0.01	32.50	2714.30	644.46

TEMPERATURE (°C)	SPAN (mV)
-5.00	25.08
35.00	25.07

y = thermistor output (counts)

$$t = PTHA0 + PTHA1 * y + PTHA2 * y^2$$

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

$$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$$

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

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

Date, Offset (%FSR)

● 06-Oct-16 -0.00

