

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 6353
 CALIBRATION DATE: 03-Nov-16

SBE 19plus V2 PRESSURE CALIBRATION DATA
 870 psia S/N 2940592

COEFFICIENTS:

PA0 =	4.154786e-001	PTCA0 =	5.250179e+005
PA1 =	2.632512e-003	PTCA1 =	1.444607e+001
PA2 =	2.332459e-011	PTCA2 =	-3.188311e-001
PTEMPA0 =	-6.705943e+001	PTCB0 =	2.513975e+001
PTEMPA1 =	5.228193e+001	PTCB1 =	9.500000e-004
PTEMPA2 =	-5.205252e-001	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.61	530582.0	1.7	14.62	0.00	32.50	1.94	530647.37
179.87	593341.0	1.7	179.81	-0.01	29.00	1.87	530659.82
359.98	661666.0	1.7	359.86	-0.01	24.00	1.77	530668.28
539.87	729889.0	1.7	539.86	-0.00	18.50	1.66	530665.68
719.88	798043.0	1.7	719.88	0.00	15.00	1.60	530660.63
869.88	854755.0	1.7	869.85	-0.00	4.50	1.39	530576.64
719.92	798068.0	1.7	719.95	0.00	1.00	1.32	530518.32
539.93	729928.0	1.7	539.95	0.00			
359.92	661692.0	1.7	359.92	0.00			
179.92	593387.0	1.7	179.93	0.00			
14.61	530582.0	1.7	14.62	0.00			

					TEMPERATURE (°C)	SPAN (mV)
					-5.00	25.14
					35.00	25.17

THERMAL CORRECTION

y = thermistor output (counts)

$$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

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

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

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

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

Date, Offset (%FSR)

● 03-Nov-16 -0.00

