

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 14998
 CALIBRATION DATE: 29-Aug-16

SBE 37 V2 PRESSURE CALIBRATION DATA
 10000 psia S/N 4959180

COEFFICIENTS:

PA0 =	2.237208e+000	PTCA0 =	5.253620e+005
PA1 =	3.034215e-002	PTCA1 =	-1.972596e+000
PA2 =	2.215379e-009	PTCA2 =	2.129826e-001
PTEMPA0 =	-9.901572e+001	PTCB0 =	1.039090e+002
PTEMPA1 =	3.955899e-002	PTCB1 =	-7.899565e-003
PTEMPA2 =	1.529887e-006	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.61	525834.0	2799.0	14.37	-0.00	32.50	2981	525932.82
2014.88	591250.0	2803.0	2012.43	-0.02	29.00	2909	525893.99
4014.89	656129.0	2804.0	4012.92	-0.02	24.00	2805	525847.70
6015.07	720458.0	2804.0	6014.95	-0.00	18.50	2691	525808.47
8014.96	784168.0	2803.0	8015.83	0.01	15.00	2617	525790.44
10014.75	847202.0	2804.0	10013.28	-0.01	4.50	2395	525767.01
8014.97	784190.0	2802.0	8016.51	0.02	1.00	2320	525770.72
6015.22	720492.0	2802.0	6015.99	0.01			
4014.90	656195.0	2800.0	4014.96	0.00			
2014.88	591314.0	2800.0	2014.40	-0.00			
14.61	525876.0	2800.0	15.63	0.01			

	TEMPERATURE (°C)	SPAN (mV)
	-4.39	103.94
	35.40	103.63

y = thermistor output (counts)

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

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

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

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

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

