

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: 9016

CALIBRATION DATE: 24-Sep-14

SBE 37 V2 PRESSURE CALIBRATION DATA

FSR: 870 psia S/N 3182128

COEFFICIENTS:

PA0 = 4.894023e-002

PA1 = 2.898591e-003

PA2 = 2.498468e-011

PTEMPA0 = -7.289508e+001

PTEMPA1 = 5.058484e-002

PTEMPA2 = -4.860522e-007

PTCA0 = 5.246506e+005

PTCA1 = 1.890212e+000

PTCA2 = -4.957441e-002

PTCB0 = 2.497713e+001

PTCB1 = 2.250000e-004

PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.48	529657.0	1933.0	14.51	0.00
179.75	586641.0	1934.0	179.74	-0.00
359.76	648664.0	1934.0	359.77	0.00
539.81	710622.0	1936.0	539.81	-0.00
719.77	772499.0	1936.0	719.79	0.00
869.77	824001.0	1936.0	869.75	-0.00
719.80	772505.0	1935.0	719.81	0.00
539.81	710624.0	1936.0	539.81	0.00
359.80	648669.0	1936.0	359.79	-0.00
179.79	586647.0	1936.0	179.76	-0.00
14.48	529644.0	1936.0	14.47	-0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2127	529912.00
29.00	2055	529918.14
24.00	1952	529921.31
18.50	1839	529922.52
15.00	1768	529920.28
4.50	1553	529910.38
1.00	1482	529906.83
TEMP (ITS90)		SPAN (mV)
-5.00		24.98
35.00		24.98

$y = \text{thermistor output}; t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$

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

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

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

