

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: 0042
CALIBRATION DATE: 14-Sep-11

SBE GLIDER PAYLOAD CTD
PRESSURE CALIBRATION DATA
44 psia S/N 3220333

COEFFICIENTS:

PA0 = -9.891704e-003
PA1 = 1.515808e-004
PA2 = -6.605448e-012
PTempa0 = -7.425343e+001
PTempa1 = 4.827782e-002
PTempa2 = -1.434117e-007

PTCA0 = 5.263702e+005
PTCA1 = -7.767126e+000
PTCA2 = 2.122233e-001
PTCB0 = 2.496538e+001
PTCB1 = -7.250000e-004
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FSR
14.63	623216.0	1999.0	14.63	-0.00
29.91	725246.0	2002.0	29.90	-0.02
34.90	758912.0	2003.0	34.91	0.03
39.90	792559.0	2005.0	39.91	0.02
44.90	826283.0	2006.0	44.90	-0.01
39.90	792472.0	2007.0	39.89	-0.02
34.91	758880.0	2009.0	34.91	0.01
29.92	725308.0	2010.0	29.91	-0.01
24.93	691908.0	2011.0	24.93	-0.01
14.63	623233.0	2013.0	14.63	0.01

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2226	628752.50
29.00	2153	628794.80
24.00	2048	628747.10
18.50	1933	628735.70
15.00	1859	628713.80
4.50	1639	628714.10
1.00	1566	628821.70

TEMP (ITS90)	SPAN (mV)
-5.00	24.97
35.00	24.94

$y = \text{thermistor output}; t = P_{\text{TempA0}} + P_{\text{TempA1}} * y + P_{\text{TempA2}} * y^2$

$x = \text{pressure output} - P_{\text{TCA0}} - P_{\text{TCA1}} * t - P_{\text{TCA2}} * t^2$

$n = x * P_{\text{TCB0}} / (P_{\text{TCB0}} + P_{\text{TCB1}} * t + P_{\text{TCB2}} * t^2)$

$\text{pressure (psia)} = P_{\text{A0}} + P_{\text{A1}} * n + P_{\text{A2}} * n^2$

Date, Avg Delta P %FS

14-Sep-11 0.00

