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: 0118
CALIBRATION DATE: 22-May-14

Glider Payload CTD PRESSURE CALIBRATION DATA
FSR: 160 psia S/N 3840151

COEFFICIENTS:

PA0 =	2.462684e-002	PTCA0 =	5.243272e+005
PA1 =	4.974174e-004	PTCA1 =	2.537717e+000
PA2 =	-7.088662e-012	PTCA2 =	-2.082956e-003
PTEMPA0 =	-7.112171e+001	PTCB0 =	2.496975e+001
PTEMPA1 =	5.147282e-002	PTCB1 =	7.500000e-004
PTEMPA2 =	-5.598566e-007	PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.64	553844.0	1867.0	14.66	0.01
29.93	584572.0	1874.0	29.92	-0.01
59.91	645075.0	1874.0	59.91	0.00
94.91	715813.0	1874.0	94.92	0.00
124.91	776548.0	1875.0	124.92	0.00
159.92	847538.0	1875.0	159.91	-0.00
124.92	776559.0	1875.0	124.92	0.00
94.92	715825.0	1877.0	94.92	0.00
59.92	645094.0	1880.0	59.92	-0.00
29.93	584575.0	1882.0	29.92	-0.01
14.64	553811.0	1885.0	14.64	0.00

THERMAL CORRECTION

TEMP ITS90	THERMISTOR OUTPUT	INST OUTPUT
32.50	2059	555477.50
29.00	1988	555475.80
24.00	1887	555461.70
18.50	1775	555452.30
15.00	1705	555432.30
4.50	1493	555408.50
1.00	1423	555406.90

TEMP (ITS90)	SPAN (mV)
-5.00	24.97
35.00	25.00

y = thermistor output; $t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$

x = pressure output - $PTCA0 - PTCA1 * t - PTCA2 * t^2$

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

pressure (psia) = $PA0 + PA1 * n + PA2 * n^2$