

# 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: 0987  
CALIBRATION DATE: 11-Feb-14

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 1327

## COEFFICIENTS:

PA0 = 8.130603e-002  
PA1 = 2.426652e-002  
PA2 = 1.627750e-009  
PTHA0 = -6.170501e+001  
PTHA1 = 5.019851e-002  
PTHA2 = -8.895363e-008

PTCA0 = 2.346775e+001  
PTCA1 = 3.205331e-001  
PTCA2 = -7.661413e-003  
PTCB0 = 2.485063e+001  
PTCB1 = -2.750000e-004  
PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.66	627.5	1663.0	14.66	0.00
104.92	4344.3	1665.0	104.91	-0.00
204.93	8460.8	1667.0	204.91	-0.00
304.93	12575.3	1667.0	304.92	-0.00
404.94	16687.5	1667.0	404.93	-0.00
504.94	20797.2	1668.0	504.93	-0.00
404.94	16689.1	1667.0	404.97	0.00
304.94	12577.1	1668.0	304.96	0.00
204.94	8462.6	1668.0	204.95	0.00
104.94	4345.3	1668.0	104.93	-0.00
14.66	628.0	1669.0	14.67	0.00

## THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	1201.90	636.80
1.00	1252.10	637.18
4.50	1321.90	638.13
8.00	1391.80	639.03
11.50	1462.00	639.55
15.00	1532.20	640.18
18.50	1602.40	640.44
22.00	1672.60	640.46
25.50	1742.70	640.33
29.00	1812.60	639.80
32.50	1882.90	639.25
TEMP(ITS90)		SPAN(mV)
-5.00		24.85
35.00		24.84

$y = \text{thermistor output}; t = \text{PTHA0} + \text{PTHA1} * y + \text{PTHA2} * y^2$

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

$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$

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

