

# 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: 1574  
CALIBRATION DATE: 03-Mar-15

SBE 39 PRESSURE CALIBRATION DATA  
508 psia S/N 4088

## COEFFICIENTS:

PA0 = 7.279769e-002  
PA1 = 2.399035e-002  
PA2 = 1.887078e-009  
PTHA0 = -9.453502e+001  
PTHA1 = 4.480721e-002  
PTHA2 = -3.332000e-007

PTCA0 = 6.224353e+001  
PTCA1 = 3.443784e-001  
PTCA2 = -9.239466e-003  
PTCB0 = 2.515488e+001  
PTCB1 = 1.175000e-003  
PTCB2 = 0.000000e+000

## PRESSURE SPAN CALIBRATION

PRESSURE PSIA	INST OUTPUT	THERMISTOR OUTPUT	COMPUTED PRESSURE	ERROR %FS
14.73	677.3	2675.0	14.74	0.00
105.02	4442.1	2676.0	105.00	-0.00
205.02	8611.5	2676.0	205.02	-0.00
305.02	12777.5	2677.0	305.02	-0.00
405.03	16941.1	2677.0	405.03	0.00
505.03	21101.2	2677.0	505.02	-0.00
405.03	16941.6	2677.0	405.04	0.00
305.03	12778.3	2677.0	305.04	0.00
205.02	8611.8	2677.0	205.02	0.00
105.02	4442.7	2677.0	105.01	-0.00
14.73	677.0	2677.0	14.73	0.00

## THERMAL CORRECTION

TEMP ITS90	PRESS TEMP	INST OUTPUT
-1.50	2109.60	694.20
1.00	2167.00	694.90
4.50	2247.70	695.78
8.00	2328.60	696.57
11.50	2409.60	697.20
15.00	2490.70	697.51
18.50	2572.00	697.63
22.00	2653.10	698.10
25.50	2734.70	697.53
29.00	2816.10	696.78
32.50	2897.40	695.73
TEMP(ITS90)		SPAN(mV)
-5.00		25.15
35.00		25.20

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

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

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

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

