

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: 1623
CALIBRATION DATE: 11-Feb-14

SBE 39 PRESSURE CALIBRATION DATA
508 psia S/N 5407

COEFFICIENTS:

PA0 = 1.970455e-001
PA1 = 2.409329e-002
PA2 = 1.591748e-009
PTHA0 = -9.215319e+001
PTHA1 = 4.442658e-002
PTHA2 = -2.699733e-007

PTCA0 = -5.849775e+002
PTCA1 = 4.279173e-001
PTCA2 = -2.308610e-003
PTCB0 = 2.431613e+001
PTCB1 = -1.575000e-003
PTCB2 = 0.000000e+000

PRESSURE SPAN CALIBRATION

| PRESSURE PSIA | INST OUTPUT | THERMISTOR OUTPUT | COMPUTED PRESSURE | ERROR %FS |
|------------------|----------------|----------------------|----------------------|--------------|
| 14.66 | 22.9 | 2602.0 | 14.67 | 0.00 |
| 104.92 | 3761.8 | 2606.0 | 104.90 | -0.00 |
| 204.93 | 7903.3 | 2608.0 | 204.91 | -0.00 |
| 304.93 | 12042.9 | 2607.0 | 304.93 | -0.00 |
| 404.94 | 16179.7 | 2608.0 | 404.94 | -0.00 |
| 504.94 | 20313.7 | 2609.0 | 504.93 | -0.00 |
| 404.94 | 16180.7 | 2608.0 | 404.96 | 0.00 |
| 304.94 | 12044.0 | 2608.0 | 304.96 | 0.00 |
| 204.94 | 7904.8 | 2608.0 | 204.95 | 0.00 |
| 104.94 | 3762.6 | 2608.0 | 104.92 | -0.00 |
| 14.66 | 23.3 | 2607.0 | 14.67 | 0.00 |

THERMAL CORRECTION

| TEMP ITS90 | PRESS TEMP | INST OUTPUT |
|---------------|---------------|----------------|
| -1.50 | 2066.50 | 27.10 |
| 1.00 | 2124.40 | 28.08 |
| 4.50 | 2205.00 | 29.64 |
| 8.00 | 2286.00 | 31.04 |
| 11.50 | 2366.90 | 32.26 |
| 15.00 | 2448.50 | 33.60 |
| 18.50 | 2529.50 | 34.97 |
| 22.00 | 2611.10 | 35.90 |
| 25.50 | 2692.40 | 37.07 |
| 29.00 | 2774.00 | 38.36 |
| 32.50 | 2855.10 | 39.11 |
| TEMP(ITS90) | | SPAN(mV) |
| -5.00 | | 24.32 |
| 35.00 | | 24.26 |

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

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

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

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

