

# SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA  
 Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0816  
 CALIBRATION DATE: 12-Jun-09

SBE 37 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -2.355999e-004  
 a1 = 3.150944e-004  
 a2 = -4.804276e-006  
 a3 = 2.188020e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 0.9999                | 653891.4             | 0.9999                | 0.0000               |
| 4.4999                | 561973.5             | 4.4999                | -0.0000              |
| 15.0001               | 363520.3             | 15.0002               | 0.0001               |
| 18.5000               | 316284.7             | 18.4999               | -0.0001              |
| 24.0001               | 255604.3             | 24.0002               | 0.0001               |
| 29.0000               | 211849.5             | 29.0000               | -0.0000              |
| 32.5000               | 186354.9             | 32.5000               | 0.0000               |

Temperature ITS-90 =  $1/\{a0 + a1[\ln(n)] + a2[\ln^2(n)] + a3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

