

# 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: 5207  
CALIBRATION DATE: 01-Nov-14

SBE 3 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS:

g = 4.32463914e-003  
h = 6.34056505e-004  
i = 2.10697342e-005  
j = 1.84469980e-006  
f0 = 1000.0

| BATH TEMP<br>(ITS-90) | INSTRUMENT FREQ<br>(Hz) | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|-------------------------|-----------------------|----------------------|
| -1.5001               | 2851.735                | -1.5001               | 0.00000              |
| 1.0000                | 3017.225                | 1.0000                | 0.00000              |
| 4.5000                | 3260.438                | 4.5000                | -0.00002             |
| 7.9999                | 3517.461                | 7.9999                | 0.00001              |
| 11.4999               | 3788.688                | 11.4999               | 0.00003              |
| 15.0000               | 4074.490                | 15.0000               | 0.00000              |
| 18.5000               | 4375.217                | 18.5000               | -0.00002             |
| 22.0000               | 4691.230                | 22.0000               | -0.00004             |
| 25.5000               | 5022.879                | 25.5000               | 0.00004              |
| 29.0000               | 5370.472                | 29.0000               | 0.00000              |
| 32.5000               | 5734.341                | 32.5000               | -0.00001             |

Temperature ITS-90 =  $1/\{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

