

# 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: 3626  
CALIBRATION DATE: 07-Jul-12

SBE4 CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

### GHIJ COEFFICIENTS

g = -9.95494155e+000  
h = 1.42521863e+000  
i = -2.51255419e-003  
j = 2.77215429e-004  
CPcor = -9.5700e-008 (nominal)  
CTcor = 3.2500e-006 (nominal)

### ABCDM COEFFICIENTS

a = 6.80907280e-007  
b = 1.41843938e+000  
c = -9.94056656e+000  
d = -8.31833995e-005  
m = 6.2  
CPcor = -9.5700e-008 (nominal)

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.64726	0.00000	0.00000
-0.9999	34.9530	2.81457	5.18054	2.81455	-0.00002
1.0001	34.9529	2.98653	5.29611	2.98655	0.00002
15.0001	34.9547	4.28680	6.09878	4.28677	-0.00003
18.5001	34.9542	4.63469	6.29608	4.63473	0.00004
29.0001	34.9503	5.72180	6.87558	5.72177	-0.00003
32.5001	34.9372	6.09469	7.06327	6.09471	0.00002

$$\text{Conductivity} = (g + hf^2 + if^3 + jf^4) / 10(1 + \delta t + \epsilon p) \text{ Siemens/meter}$$

$$\text{Conductivity} = (af^m + bf^2 + c + dt) / [10 (1 + \epsilon p)] \text{ Siemens/meter}$$

t = temperature[°C]; p = pressure[decibars];  $\delta$  = CTcor;  $\epsilon$  = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients

Date, Slope Correction

