

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 775  
 CALIBRATION DATE: 02-May-91

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

**GHIJ COEFFICIENTS**

g = -4.17009341e+00  
 h = 5.00608439e-01  
 i = 4.15566000e-05  
 j = 2.75928145e-05  
 CPcor = -9.57e-08 (nominal)  
 CTcor = 3.25e-06 (nominal)

**ABCDM COEFFICIENTS**

a = 2.22515182e-04  
 b = 4.99163605e-01  
 c = -4.16158847e+00  
 d = 4.34938636e-04  
 m = 3.3  
 CPcor = -9.57e-08 (nominal)

BATH TEMP (IPTS-68 °C)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.88509	0.00007	0.00007
2.8128	14.9610	1.44788	6.09611	1.44765	-0.00023
10.7223	14.9620	1.79039	6.63073	1.79040	0.00001
18.7227	14.9617	2.15983	7.16220	2.15998	0.00015
27.0298	14.9622	2.56396	7.70076	2.56389	-0.00007
-0.8775	34.9114	2.82195	8.02753	2.82198	0.00003
6.6168	34.9100	3.48492	8.80690	3.48491	-0.00001
14.6774	34.9090	4.24981	9.62716	4.25000	0.00019
22.9328	34.9094	5.08004	10.44313	5.07989	-0.00015
31.2464	34.9076	5.95454	11.23802	5.95455	0.00001

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

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

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

Residual = (instrument conductivity - bath conductivity) using a, b, c, d, m coefficients

