

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3765  
CALIBRATION DATE: 18-Jan-12

SBE 37 CONDUCTIVITY CALIBRATION DATA  
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

## COEFFICIENTS:

g = -1.029535e+000  
h = 1.418575e-001  
i = -3.096324e-004  
j = 4.378922e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -8.7050e-006

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2699.16	0.00000	0.00000
0.9997	34.9500	2.98627	5328.28	2.98629	0.00002
15.0000	34.8847	4.27911	6123.36	4.27907	-0.00005
18.5000	34.8748	4.62529	6319.00	4.62529	0.00000
24.0000	34.8635	5.18487	6622.68	5.18490	0.00003
29.0000	34.8553	5.70799	6894.13	5.70802	0.00003
32.5000	34.8479	6.08088	7081.04	6.08084	-0.00003

$f = \text{INST FREQ} * \sqrt{1.0 + \text{WBOTC} * t} / 1000.0$

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

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

Residual = instrument conductivity - bath conductivity

