

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2321  
CALIBRATION DATE: 13-Dec-11

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

## COEFFICIENTS:

g = -9.768712e-001

CPcor = -9.5700e-008

h = 1.318398e-001

CTcor = 3.2500e-006

i = -1.628803e-004

WBOTC = -4.1294e-006

j = 3.253337e-005

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	2724.26	0.00000	0.00000
1.0000	34.5773	2.95748	5461.12	2.95748	0.00000
4.4999	34.5570	3.26265	5668.15	3.26266	0.00001
15.0000	34.5129	4.23831	6283.53	4.23830	-0.00001
18.5000	34.5026	4.58122	6485.64	4.58121	-0.00001
24.0000	34.4905	5.13549	6799.31	5.13550	0.00000
29.0000	34.4809	5.65353	7079.57	5.65358	0.00004
32.5000	34.4723	6.02275	7272.45	6.02272	-0.00003

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

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

