

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0164

CALIBRATION DATE: 27-Sep-15

Glider Payload CTD CONDUCTIVITY CALIBRATION DATA

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

COEFFICIENTS:

g = -9.909070e-001

h = 1.420992e-001

i = -8.378833e-005

j = 2.555008e-005

CPcor = -9.5700e-008

CTcor = 3.2500e-006

WBOTC = 2.8395e-007

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	2641.10	0.00000	0.00000
0.9999	34.6755	2.96507	5271.35	2.96507	0.00001
4.4999	34.6557	3.27105	5470.70	3.27105	-0.00000
15.0000	34.6131	4.24932	6063.56	4.24930	-0.00002
18.4999	34.6042	4.59325	6258.44	4.59325	0.00000
24.0000	34.5944	5.14925	6560.98	5.14928	0.00003
29.0000	34.5897	5.66937	6831.56	5.66935	-0.00001
32.5000	34.5878	6.04063	7018.15	6.04056	-0.00007

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

Conductivity = $(g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p)$ Siemens / meter

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

