

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2025
CALIBRATION DATE: 04-Mar-15

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

COEFFICIENTS:

g = -1.015211e+000
h = 1.402810e-001
i = -7.119975e-005
j = 2.900915e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 9.2934e-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	2689.96	0.00000	0.00000
1.0000	34.6669	2.96441	5317.89	2.96442	0.00001
4.5000	34.6471	3.27033	5517.56	3.27032	-0.00001
15.0000	34.6042	4.24834	6111.44	4.24833	-0.00001
18.5000	34.5950	4.59217	6306.66	4.59217	0.00000
24.0000	34.5849	5.14800	6609.73	5.14801	0.00001
29.0000	34.5794	5.66787	6880.77	5.66786	-0.00001
32.5000	34.5768	6.03893	7067.64	6.03887	-0.00006

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

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

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

Residual = instrument conductivity - bath conductivity

