

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 2023
CALIBRATION DATE: 05-Feb-14

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

COEFFICIENTS:

g = -1.035223e+000

CPcor = -9.5700e-008

h = 1.486247e-001

CTcor = 3.2500e-006

i = 1.046378e-004

WBOTC = -2.5476e-005

j = 2.733909e-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	2635.81	0.00000	0.00000
1.0000	34.6873	2.96599	5166.66	2.96602	0.00003
4.5000	34.6678	3.27209	5359.52	3.27206	-0.00003
15.0000	34.6263	4.25076	5933.45	4.25072	-0.00004
18.5000	34.6176	4.59485	6122.18	4.59486	0.00001
24.0000	34.6081	5.15107	6415.21	5.15112	0.00005
29.0000	34.6024	5.67121	6677.22	5.67119	-0.00002
32.5000	34.5986	6.04231	6857.87	6.04230	-0.00000

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

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

