

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2024  
CALIBRATION DATE: 20-Nov-15

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

## COEFFICIENTS:

g = -9.951710e-001  
h = 1.474307e-001  
i = -1.225298e-004  
j = 3.567414e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = 3.8161e-006

BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2598.67	0.00000	0.00000
1.0000	34.7575	2.97142	5181.32	2.97144	0.00002
4.5000	34.7383	3.27809	5376.94	3.27807	-0.00002
15.0000	34.6958	4.25839	5958.54	4.25838	-0.00001
18.5001	34.6868	4.60305	6149.66	4.60305	-0.00000
24.0000	34.6770	5.16019	6446.29	5.16021	0.00002
29.0000	34.6716	5.68128	6711.50	5.68129	0.00001
32.4999	34.6687	6.05315	6894.32	6.05314	-0.00001

$f = \text{Instrument Output(Hz)} * \text{sqrt}(1.0 + \text{WBOTC} * t) / 1000.0$

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

Conductivity (S/m) =  $(g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$

Residual (Siemens/meter) = instrument conductivity - bath conductivity

