

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3765  
CALIBRATION DATE: 05-Oct-16

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

## COEFFICIENTS:

g = -1.030317e+000  
h = 1.416895e-001  
i = -1.902556e-004  
j = 3.516707e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -8.7050e-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	2699.31	0.00000	0.00000
1.0000	34.8210	2.97633	5318.03	2.97634	0.00001
4.4999	34.8013	3.28344	5517.44	3.28343	-0.00001
15.0000	34.7590	4.26533	6110.78	4.26532	-0.00001
18.5000	34.7503	4.61056	6305.89	4.61056	0.00000
24.0000	34.7409	5.16865	6608.82	5.16865	0.00001
29.0001	34.7364	5.69071	6879.82	5.69071	-0.00000
32.5000	34.7342	6.06329	7066.69	6.06329	0.00000

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

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

