



Sea-Bird Scientific  
13431 NE 20<sup>th</sup> Street  
Bellevue, WA 98005  
USA

+1 425-643-9866  
seabird@seabird.com  
www.seabird.com

SENSOR SERIAL NUMBER: 4285  
CALIBRATION DATE: 07-Feb-21

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

COEFFICIENTS:

g = -1.035327e+000  
h = 1.435810e-001  
i = -3.130342e-004  
j = 4.810219e-005

CPcor = -9.5700e-008  
CTcor = 3.2500e-006  
WBOTC = -1.2233e-005

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	2690.28	0.00000	0.00000
1.0000	34.5920	2.95861	5279.95	2.95865	0.00004
4.5000	34.5733	3.26405	5477.45	3.26402	-0.00003
15.0000	34.5336	4.24059	6065.15	4.24052	-0.00006
18.5000	34.5256	4.58395	6258.42	4.58394	-0.00001
24.0000	34.5173	5.13904	6558.52	5.13916	0.00011
29.0000	34.5133	5.65825	6826.77	5.65819	-0.00006
32.5000	34.5111	6.02876	7011.84	6.02886	0.00010

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

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

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

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

