



Sea-Bird Scientific
 13431 NE 20th Street
 Bellevue, WA 98005
 USA

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

SENSOR SERIAL NUMBER: 0131
 CALIBRATION DATE: 18-Aug-24

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

COEFFICIENTS:

g = -9.99765058e+000
 h = 1.12610961e+000
 i = -4.37656127e-003
 j = 4.05979206e-004

CPcor = -9.5700e-008 (nominal)
 CTcor = 3.2500e-006 (nominal)

BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (kHz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2.99220	0.00000	0.00000
1.0000	34.6803	2.96545	5.96494	2.96549	0.00005
4.5000	34.6612	3.27153	6.19049	3.27148	-0.00005
15.0000	34.6198	4.25005	6.86127	4.25003	-0.00002
18.5001	34.6114	4.59412	7.08170	4.59412	-0.00000
23.9999	34.6023	5.15029	7.42378	5.15035	0.00006
28.9999	34.5967	5.67037	7.72943	5.67034	-0.00003
32.5001	34.5925	6.04137	7.94023	6.04169	0.00032

f = Instrument Output (kHz)

t = temperature (°C); p = pressure (decibars); δ = CTcor; ϵ = CPcor;

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

$$\text{Residual (Siemens/meter)} = \text{instrument conductivity} - \text{bath conductivity}$$

