

# 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: 4547  
 CALIBRATION DATE: 07-Dec-16

SBE 19plus PRESSURE CALIBRATION DATA  
 1450 psia S/N 3803

**COEFFICIENTS:**

PA0 =	-7.287690e-001	PTCA0 =	5.212578e+005
PA1 =	4.432294e-003	PTCA1 =	-1.701489e+001
PA2 =	-1.219951e-011	PTCA2 =	4.451300e-001
PTEMPA0 =	-6.085739e+001	PTCB0 =	2.479575e+001
PTEMPA1 =	6.279069e+001	PTCB1 =	-8.500000e-004
PTEMPA2 =	-1.511069e+000	PTCB2 =	0.000000e+000

**PRESSURE SPAN CALIBRATION**

**THERMAL CORRECTION**

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
14.81	524602.0	1.3	14.82	0.00	32.50	1.54	524673.98
314.88	592258.0	1.3	314.84	-0.00	29.00	1.48	524648.90
615.01	659951.0	1.3	614.91	-0.01	24.00	1.40	524618.81
915.07	727680.0	1.3	915.02	-0.00	18.50	1.30	524600.91
1214.68	795305.0	1.3	1214.57	-0.01	15.00	1.25	524601.97
1465.05	851872.0	1.3	1465.04	-0.00	4.50	1.07	524691.39
1214.98	795423.0	1.3	1215.09	0.01	1.00	1.01	524751.41
914.95	727691.0	1.3	915.07	0.01			
615.06	659978.0	1.3	615.03	-0.00			
314.94	592311.0	1.3	315.07	0.01			
14.82	524593.0	1.3	14.78	-0.00			

  

	TEMPERATURE (°C)	SPAN (mV)
	-5.00	24.80
	35.00	24.77

y = thermistor output (counts)

$$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$$

$$x = \text{instrument output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$$

$$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$$

$$\text{pressure (PSIA)} = PA0 + PA1 * n + PA2 * n^2$$

$$\text{Residual (\%FSR)} = (\text{computed pressure} - \text{true pressure}) * 100 / \text{Full Scale Range}$$

Date, Offset (%FSR)

● 07-Dec-16 0.00

