



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

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

SENSOR SERIAL NUMBER: 3768
CALIBRATION DATE: 14-Jun-18

SBE 37 PRESSURE CALIBRATION DATA
1450 psia S/N 5757

COEFFICIENTS:

PA0 =	3.143598e-001	PTCA0 =	-1.693566e+002
PA1 =	6.885091e-002	PTCA1 =	5.694026e-002
PA2 =	-3.837571e-009	PTCA2 =	6.418297e-003
		PTCB0 =	2.487912e+001
		PTCB1 =	-1.750000e-004
		PTCB2 =	0.000000e+000

PRESSURE SPAN CALIBRATION

THERMAL CORRECTION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	TEMPERATURE (°C)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)	TEMP (°C)	INSTRUMENT OUTPUT (counts)
14.65	43.6	22.6	14.66	0.00	32.50	58.84
301.90	4215.4	22.5	301.87	-0.00	29.00	57.50
589.02	8388.4	22.6	589.02	-0.00	24.00	55.60
876.06	12560.5	22.5	875.98	-0.01	18.50	53.58
1163.20	16738.0	22.5	1163.18	-0.00	15.00	52.41
1450.28	20916.0	22.5	1450.27	-0.00	4.50	50.87
1163.33	16740.8	22.5	1163.37	0.00	1.00	50.36
876.15	12563.8	22.5	876.21	0.00		
589.05	8388.9	22.5	589.06	0.00	TEMPERATURE (°C)	SPAN
301.89	4216.0	22.5	301.91	0.00	-5.00	24.88
14.65	43.3	22.6	14.64	-0.00	35.00	24.87

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

$$n = x * \text{PTCB0} / (\text{PTCB0} + \text{PTCB1} * t + \text{PTCB2} * t^2)$$

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

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

