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| Sensor | Range | Conversion | Zeroing factor | Example |
| ADXL 335 | -3g to 3g  (3 axes) | 300mv = 1g | Assume output of 330 mv when sensor is still | Output: 560  Conversion:  4.9\*(560mv - 330mv)/(300mv/g) = +3.77g |
| ADXL 326 | -16g to 16g  (3 axes) | 57mv = 1g | Assume output of 330 mv when sensor is still | Output: 430  Conversion:  4.9\*(430mv - 330mv)/(57mv/g) = +8.58g |
| ADXL 78 | -50g to 50g  (1 axis) | 38mv =1g | Assume output of 330 mv when sensor is still | Output: 120  Conversion:  4.9\*(120mv - 330mv)/(38mv/g) = -27.05g |
| BMP085  (Pressure  /Temperature) | 30000-110000 Pa | Output is Pascals  (1 pascal = 0.000145037738 Psi)  Temp Output is in units of 0.1 oC | Check current pressure at current location and subtract difference from output – same with temperature | Output (pressure): 84000  Conversion: (84000Pa)  /(6896.55Pa/Psi) =  12.18 Psi  Output (temperature): 330  Conversion:  (330(.1 oC))  /(10(.1 oC)/oC) |
| ITG 3200  (Gyroscope) | -500 to 500 degrees/second or d/s | 14.375 mv = 1 degrees/second or d/s | Assume off by +10 d/s | Output: 200mv  Conversion:  (200mv - 10mv)  /(14.375mv/(d/s)) = 13.22 d/s |
| HIH 4000  (Humidity) | 0 to 100% RH (Relative Humidity) | RH=  (V - 0.8)/(.0310(1.0546 -.00216T))  Where T is Temperature in  oC (from Pressure) and V is output voltage | Assume no bias | Output: 340 and 22 oC  Conversion:  ((.340\*4.9) - 0.8)  /(.0310(1.0546 - .00216(22  oC)) =  142.22% |
| Geiger Counter | N/A | N/A |  | N/A |

Sensor Conversions