|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | CONF #1 | | | CONF #2 | | |
| DAQ  mode | Load | DAQ range | Mean [loaded] - mean [unloaded] | Noise level | DAQ range | Mean [loaded] - mean [unloaded] | Noise level |
| [g] | [土 V] | [V] | [V rms] | [土 V] | [V] | [V rms] |
| RSE  (half bridge) | 0  Unloaded | 5 | 1.36847  -  1.36836  =  0.00011 | 0.000144889 | 0.2 | 0.00758964  -  0.00773583  =  (-0.00014619 | 6.67734E-5 |
| (bottle)  Loaded |
| Diff  (full bridge) | 0  Unloaded | 0.2 | (-0.000566717)  -  (-0.000269979)  =  (-0.000296735) | 1.70433E-5 | 0.2 | (-0.000570236)  -  (-0.000273345)  =  -0.000296891 | 1.71735E-5 |
| (bottle)  Loaded |

Signal-to-noise ration

|  |
| --- |
| 0.7592018718(RSE) |
| −17.41065404 |
| −2.189344859(RSE) |
| −17.28773983 |

RSE config #1

Range: 5 because the measured signal is around 1.5(from the voltage divider)

RSE config #2

* Noise must be identical in both channels

**Differential mode**

Differential measurement evaluates the difference in voltage between the two inputs

Unloaded V = -0.00138225

Loaded V = -0.00131649

Difference = -0.00131649 + 0.00138225 = 0.00006576

K = 500/ 0.00006576 = 7603406.326

-0.000683856 + 0.00033684 = -0.000347016