

Measurements

May 27, 2022

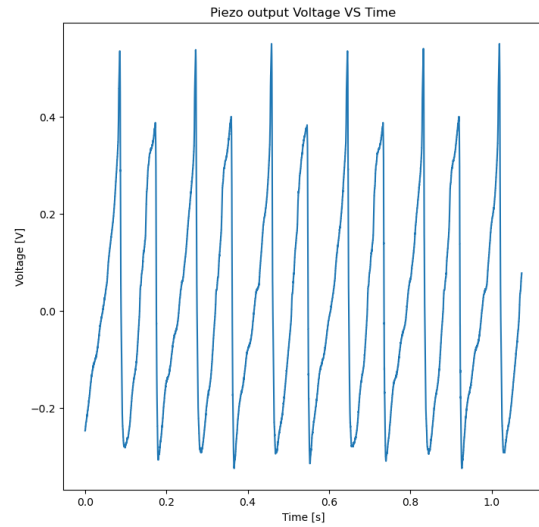
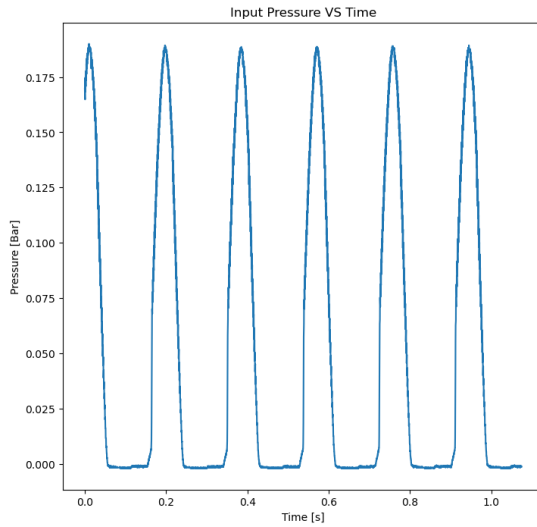
1 PARAMETERS

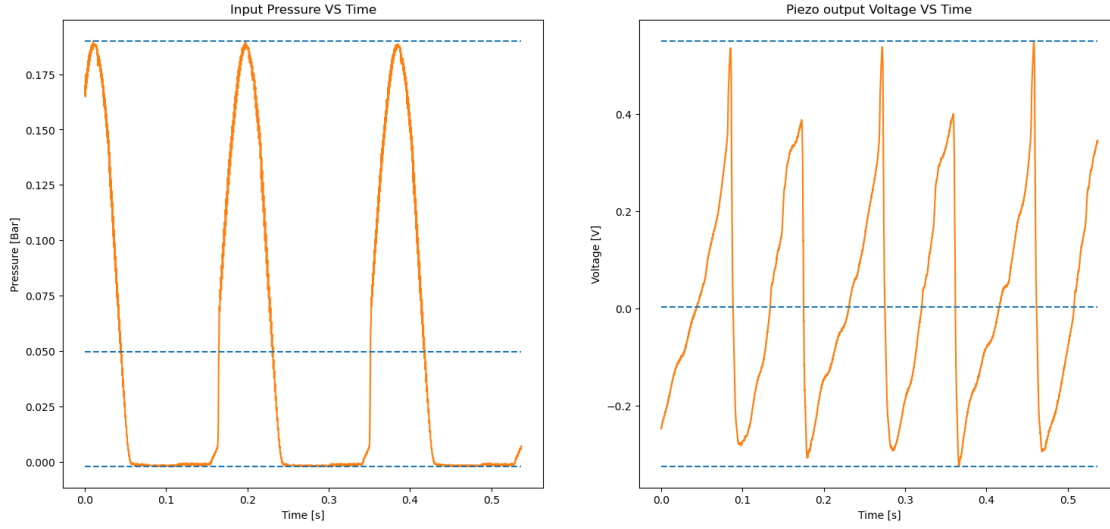
Sample name: ZNO-109-30min

| | Parameter | Value | Unit |
|---|------------------|---------------|--------|
| 0 | Sample name | ZNO-109-30min | |
| 1 | Measure duration | 1.073741824 | [s] |
| 2 | Rload | 1000000.0 | [Ohms] |
| 3 | Nb Periods | 3.0 | [1] |
| 4 | R Circuit | 1.0 | [Ohms] |
| 5 | Max Frequency | 100.0 | [Hz] |

2 PRESSURE AND VOLTAGE MEASUREMENTS

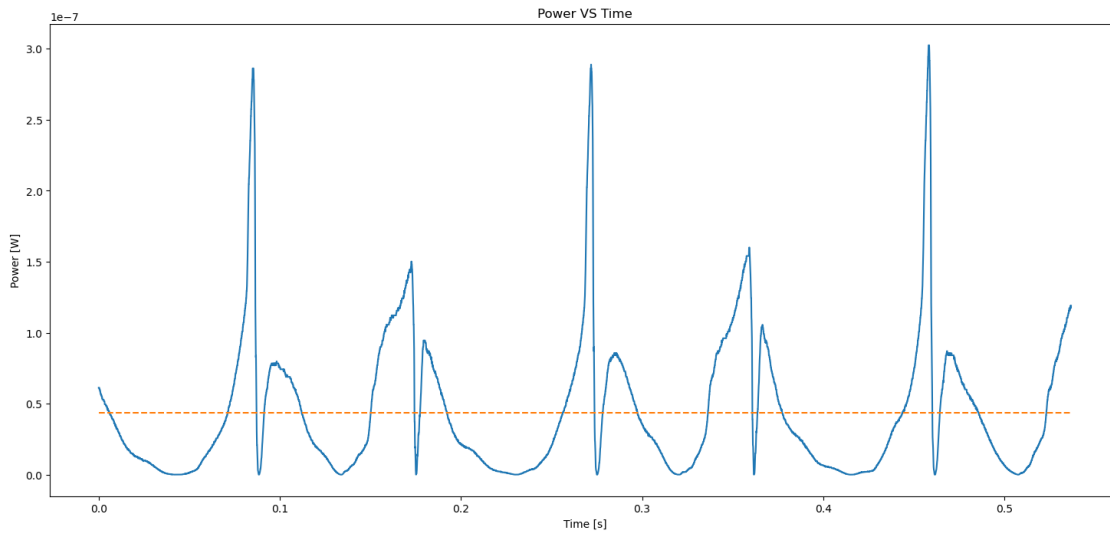
The input frequency is: 5.59 Hz





| | Variable | Min | Max | Peak to peak | Mean | Mean of absolute value |
|---|----------------|-----------|----------|--------------|----------|------------------------|
| 0 | Pressure [Bar] | -2.10e-03 | 1.90e-01 | 1.92e-01 | 4.96e-02 | 5.13e-02 |
| 1 | Voltage [V] | -3.25e-01 | 5.50e-01 | 8.75e-01 | 2.95e-03 | 1.79e-01 |

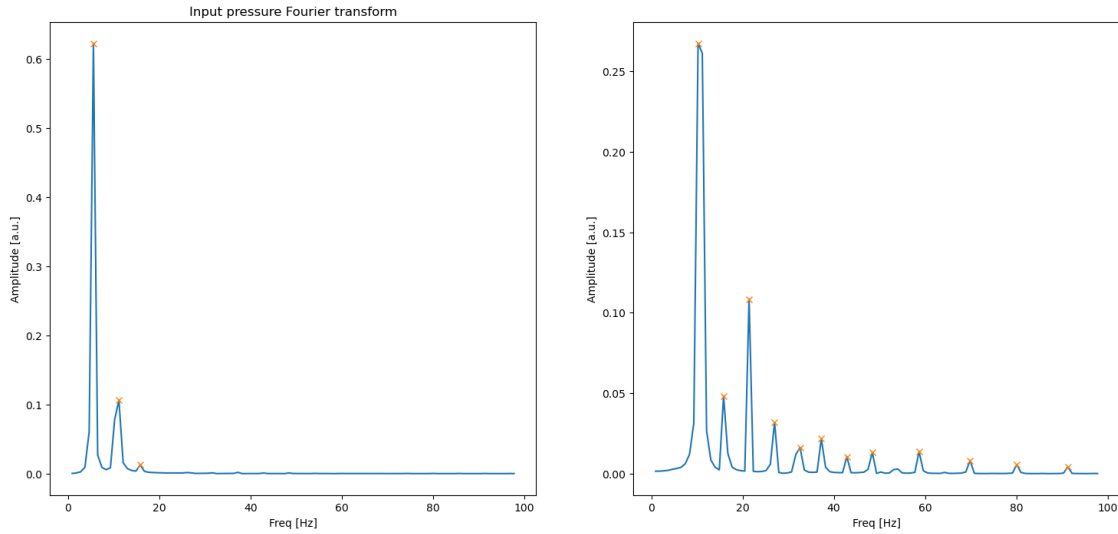
3 POWER



Mean power: 4.38e-08 [W]

4 FREQUENCY ANALYSIS

If an harmonic appears in the pressure Fourier transform. The piston has to be set to atmospheric pressure.



4.1 Voltage frequency peaks

| | Freq [Hz] | Amplitude percentage |
|----|-----------|----------------------|
| 0 | 10.25 | 26.75 |
| 1 | 15.83 | 4.83 |
| 2 | 21.42 | 10.85 |
| 3 | 27.01 | 3.19 |
| 4 | 32.60 | 1.62 |
| 5 | 37.26 | 2.17 |
| 6 | 42.84 | 1.05 |
| 7 | 48.43 | 1.32 |
| 8 | 58.68 | 1.36 |
| 9 | 69.85 | 0.82 |
| 10 | 80.10 | 0.57 |
| 11 | 91.28 | 0.42 |

4.2 Pressure frequency peaks

| | Freq [Hz] | Amplitude percentage |
|---|-----------|----------------------|
| 0 | 5.59 | 62.21 |
| 1 | 11.18 | 10.59 |
| 2 | 15.83 | 1.25 |