

# Measurements

April 22, 2022

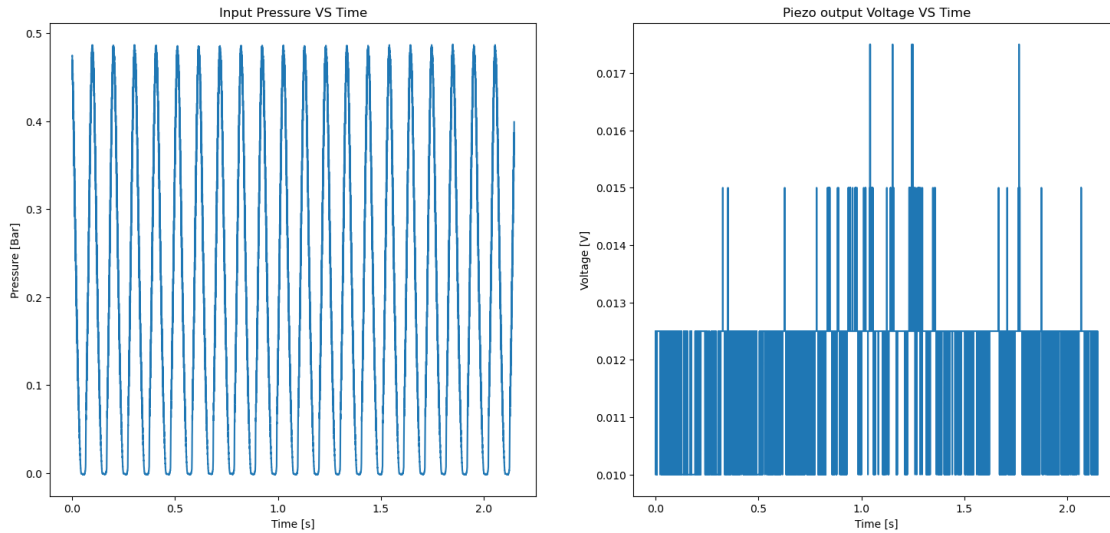
## 1 PARAMETERS

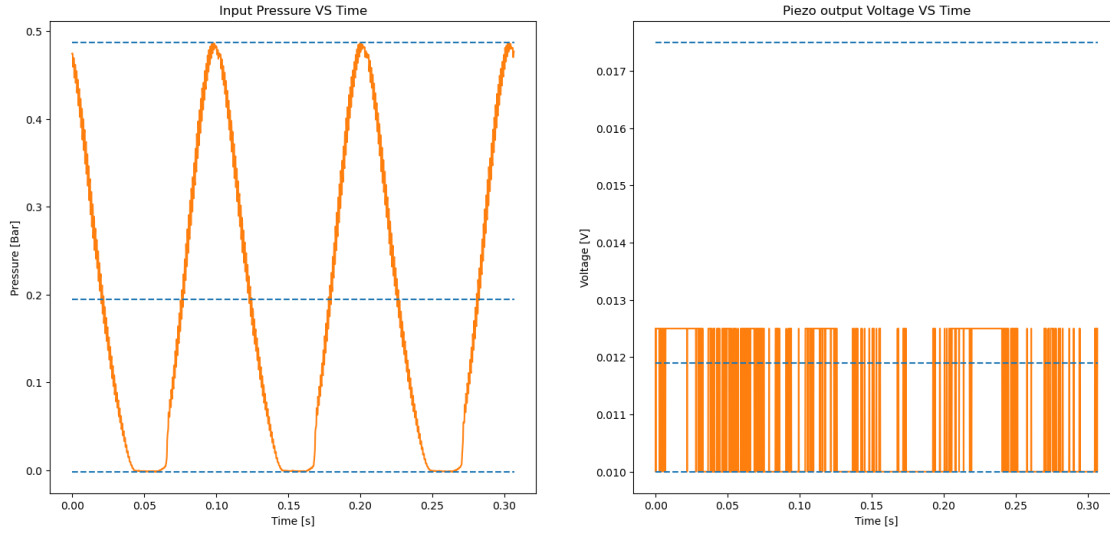
Sample name: AB-211206-085-ZNO

|   | Parameter        | Value             | Unit   |
|---|------------------|-------------------|--------|
| 0 | Sample name      | AB-211206-085-ZNO |        |
| 1 | Measure duration | 2.147483648       | [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

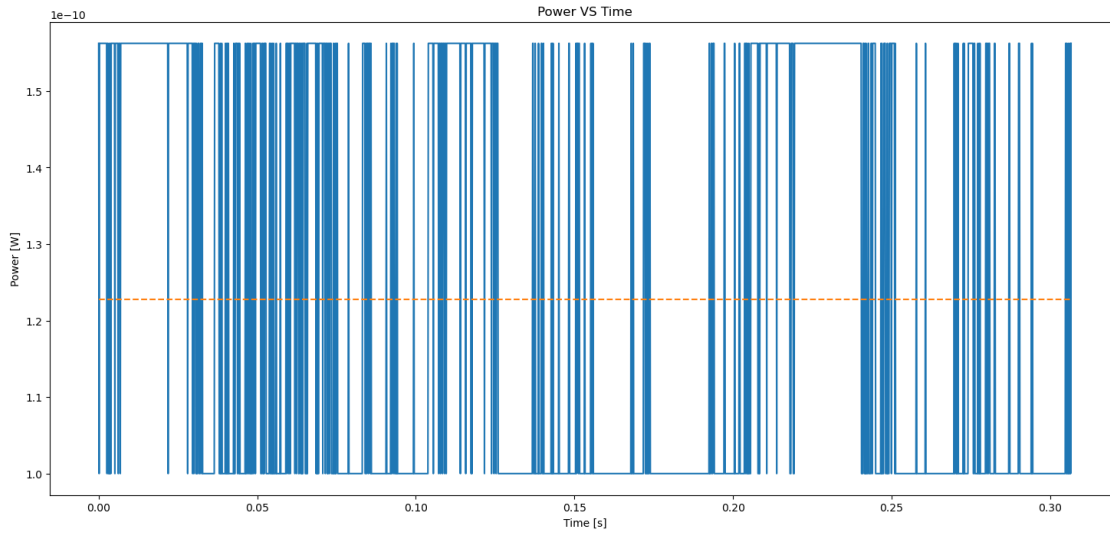
The input frequency is: 9.78 Hz





|   | Variable       | Min       | Max      | Peak to peak | Mean     | Mean of absolute value |
|---|----------------|-----------|----------|--------------|----------|------------------------|
| 0 | Pressure [Bar] | -1.75e-03 | 4.87e-01 | 4.89e-01     | 1.94e-01 | 1.95e-01               |
| 1 | Voltage [V]    | 1.00e-02  | 1.75e-02 | 7.50e-03     | 1.19e-02 | 1.19e-02               |

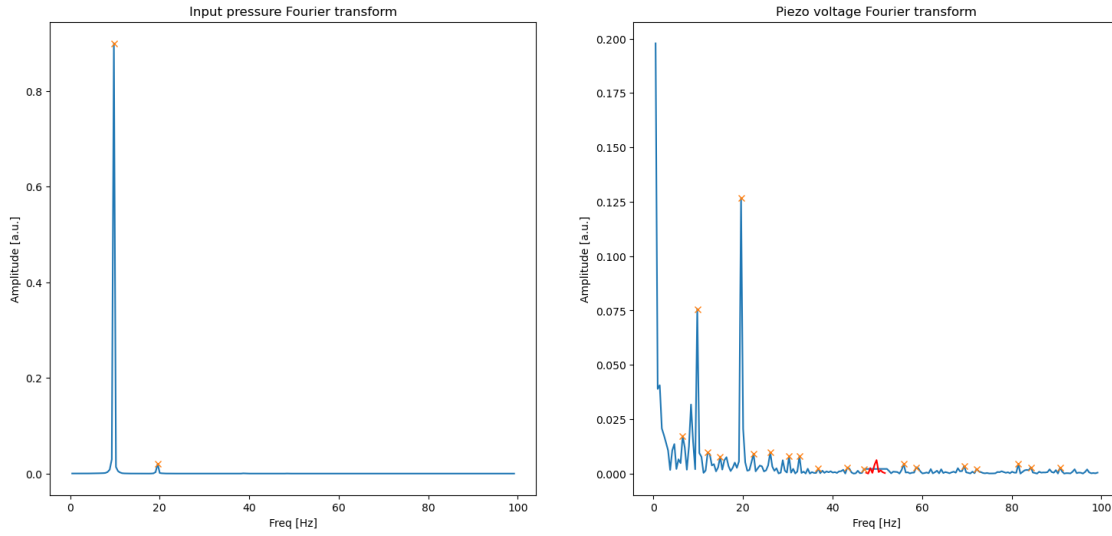
### 3 POWER



Mean power: 1.23e-10 [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  | 6.52      | 1.73                 |
| 1  | 9.78      | 7.57                 |
| 2  | 12.11     | 0.97                 |
| 3  | 14.90     | 0.78                 |
| 4  | 19.56     | 12.68                |
| 5  | 22.35     | 0.91                 |
| 6  | 26.08     | 0.98                 |
| 7  | 30.27     | 0.79                 |
| 8  | 32.60     | 0.80                 |
| 9  | 36.79     | 0.23                 |
| 10 | 43.31     | 0.28                 |
| 11 | 47.03     | 0.21                 |
| 12 | 55.88     | 0.43                 |
| 13 | 58.68     | 0.29                 |
| 14 | 69.39     | 0.35                 |
| 15 | 72.18     | 0.21                 |
| 16 | 81.50     | 0.43                 |
| 17 | 84.29     | 0.29                 |
| 18 | 90.81     | 0.27                 |

## 4.2 Pressure frequency peaks

|   | Freq [Hz] | Amplitude percentage |
|---|-----------|----------------------|
| 0 | 9.78      | 89.95                |
| 1 | 19.56     | 2.04                 |