Measurements

March 16, 2022

1 PARAMETERS

```
HBox(children=(Label(value='Sample name :'), Text(value='test',␣
↪placeholder='Custom Name')))
```

```
HBox(children=(Label(value='Measure duration [s] :'), parameter(value=3.0,␣
↪continuous_update=True, step=0.1)))
```

```
HBox(children=(Label(value='Load resistance [Ohms] :'), parameter(value=300000.
↪0, continuous_update=True, step…
```

```
HBox(children=(Label(value='Nombre of periods [1] :'), parameter(value=5.0,␣
↪continuous_update=True, step=1.0))…
```

```
HBox(children=(Label(value='Circuit resistance [Ohms] :'), parameter(value=1.0,␣
↪continuous_update=True, step=1…
```

```
HBox(children=(Label(value='Maximum frequency for analysis: [Hz] :'),␣
↪parameter(value=100.0, continuous_update…
```

```
Button(description='Save parameters', style=ButtonStyle())
```

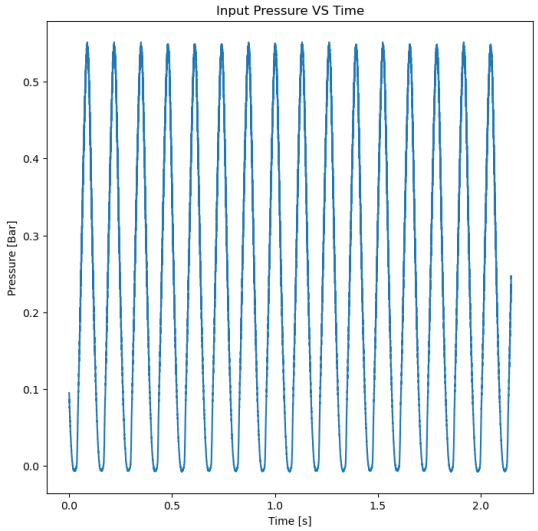
```
Output()
```

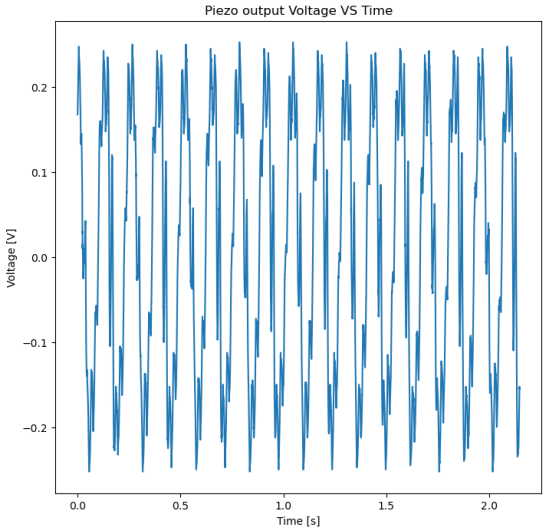
```
Sample name: test
```

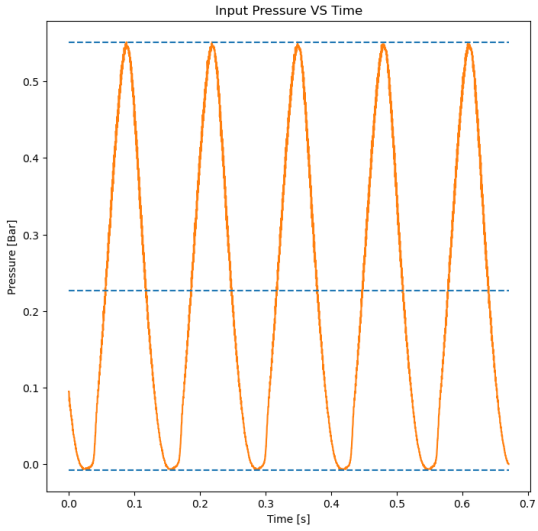
	Parameter	Value	Unit
0	Sample name	test	
1	Measure duration	3.0	[s]
2	Rload	300000.0	[Ohms]
3	Nb Periods	5.0	[1]
4	R Circuit	1.0	[Ohms]
5	Max Frequency	100.0	[Hz]

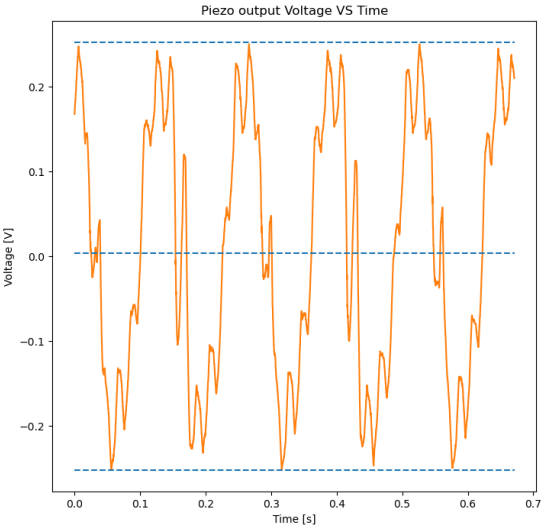
2 PRESSURE AND VOLTAGE MEASUREMENTS

```
The input frequency is:  7.45 Hz
```



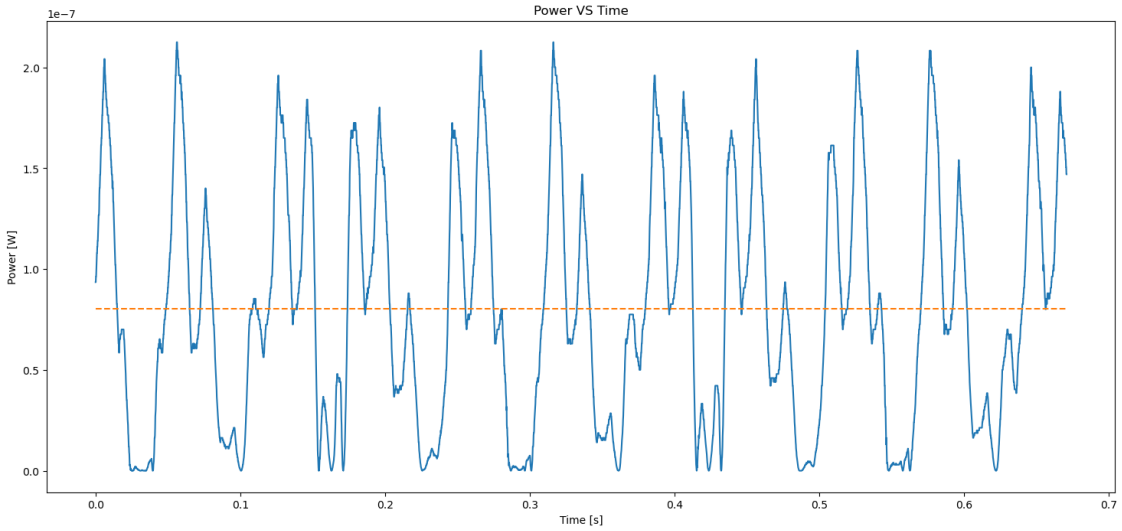






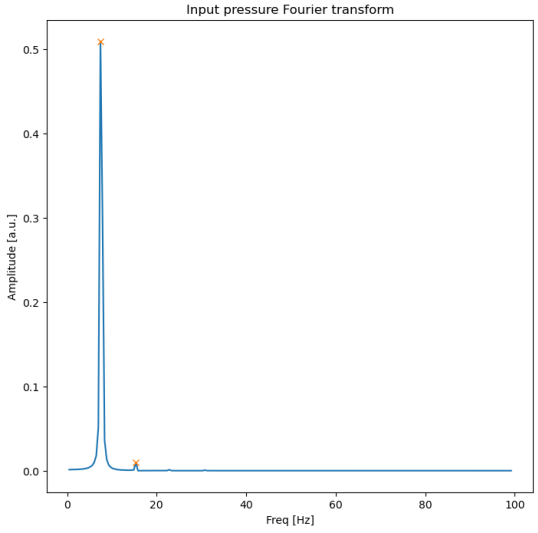
	Variable	Min	Max	Peak to peak	Mean	Mean of absolute value
0	Pressure [Bar]	-7.50e-03	5.51e-01	5.59e-01	2.27e-01	2.28e-01
1	Voltage [V]	-2.53e-01	2.53e-01	5.05e-01	3.11e-03	1.39e-01

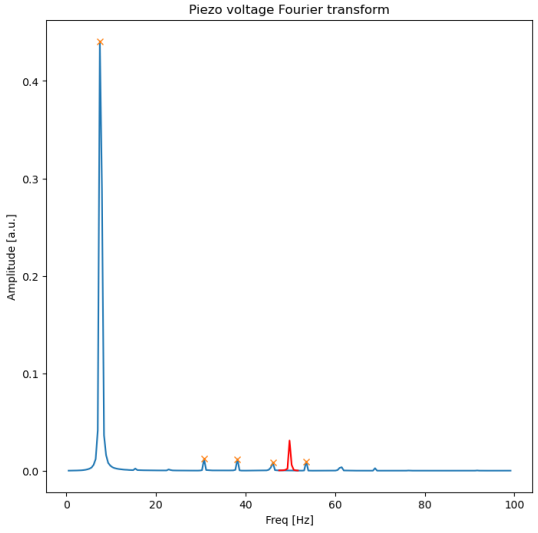
3 POWER



Mean power: 8.05e-08 [W]

4 FREQUENCY ANALYSIS





4.1 Voltage frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.45	44.07
1	30.74	1.20
2	38.19	1.19
3	46.10	0.81
4	53.55	0.95

4.2 Pressure frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.45	50.95
1	15.37	0.97