

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())
```

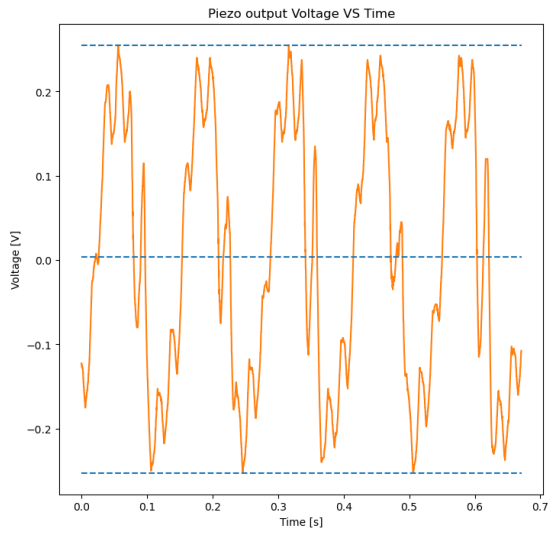
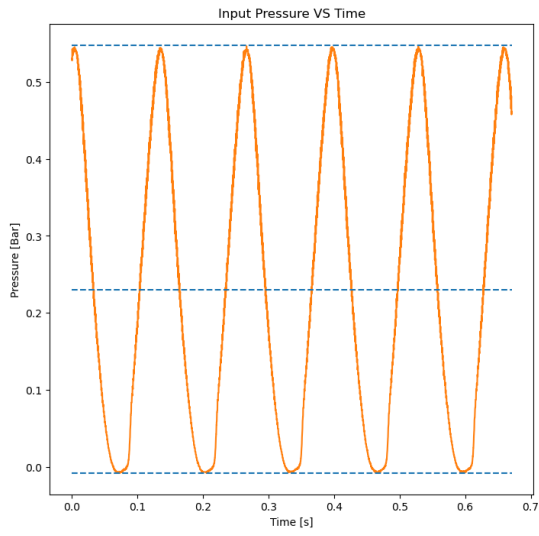
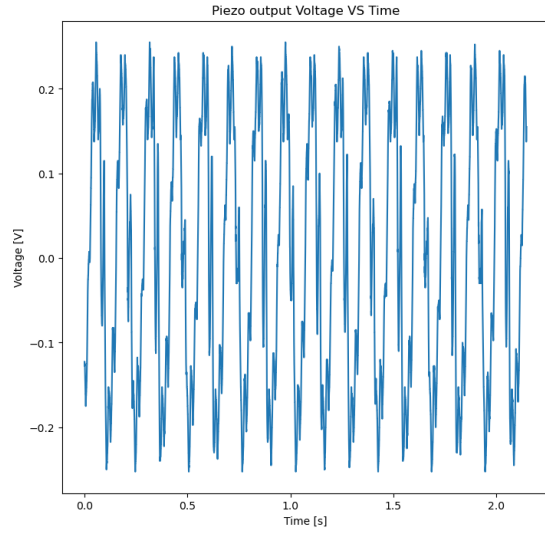
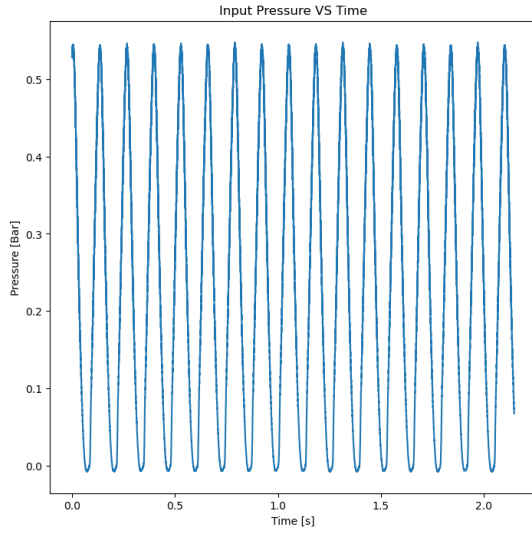
Output()

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]

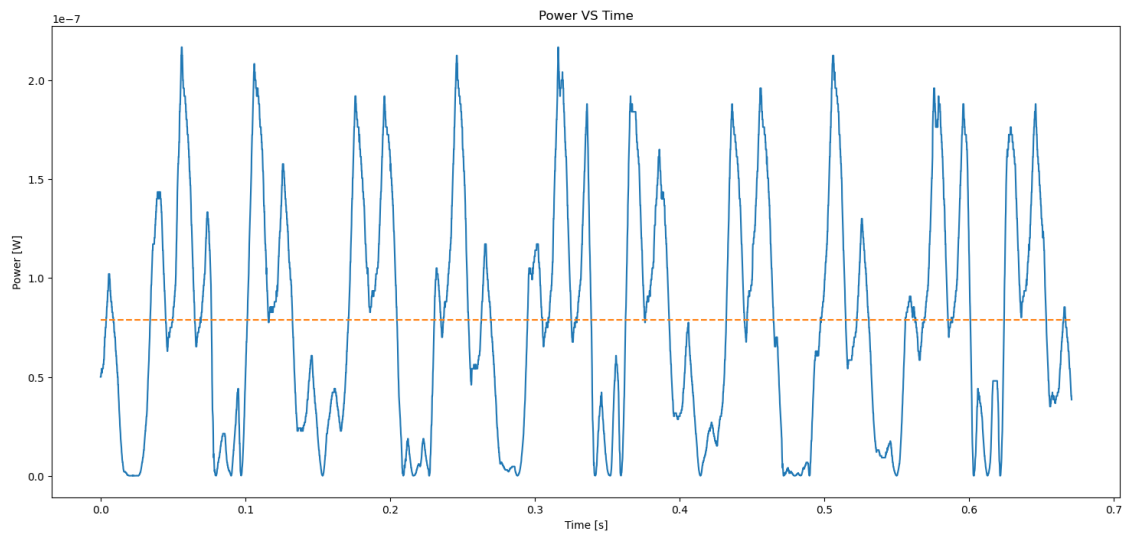
2 PRESSURE AND VOLTAGE MEASUREMENTS

The input frequency is: 7.45 Hz



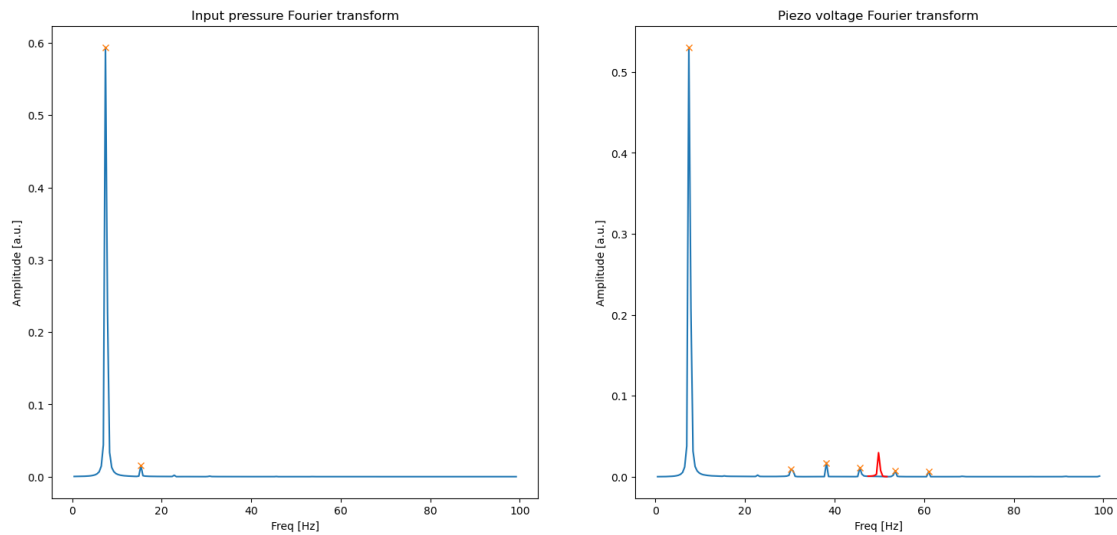
	Variable	Min	Max	Peak to peak	Mean	Mean of absolute value
0	Pressure [Bar]	-7.50e-03	5.47e-01	5.55e-01	2.30e-01	2.32e-01
1	Voltage [V]	-2.53e-01	2.55e-01	5.08e-01	4.06e-03	1.37e-01

3 POWER



Mean power: $7.87e-08$ [W]

4 FREQUENCY ANALYSIS



4.1 Voltage frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.45	53.04
1	30.27	0.94
2	38.19	1.73
3	45.64	1.09
4	53.55	0.71
5	61.01	0.63

4.2 Pressure frequency peaks

	Freq [Hz]	Amplitude percentage
0	7.45	59.40
1	15.37	1.52