

Measurements

May 6, 2022

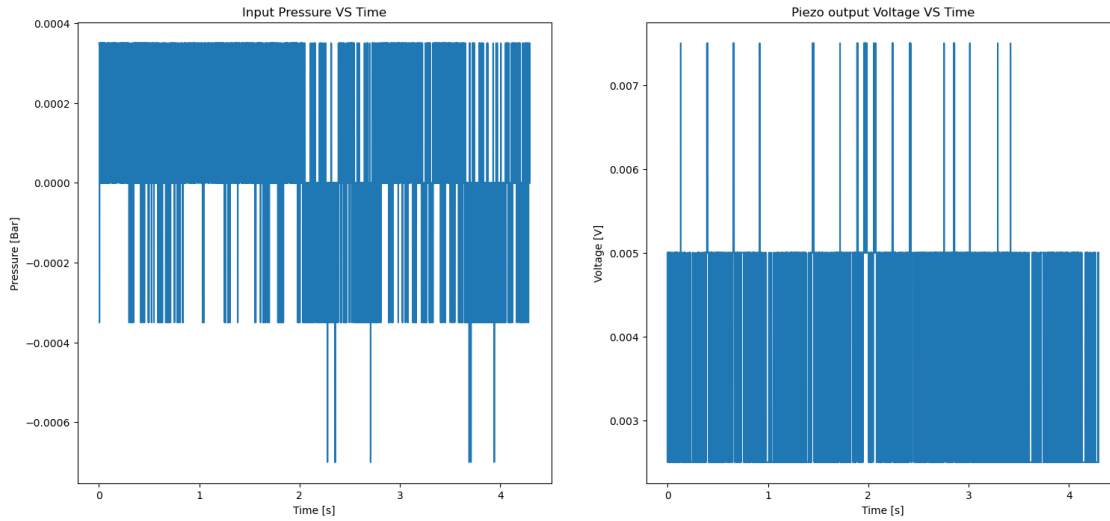
1 PARAMETERS

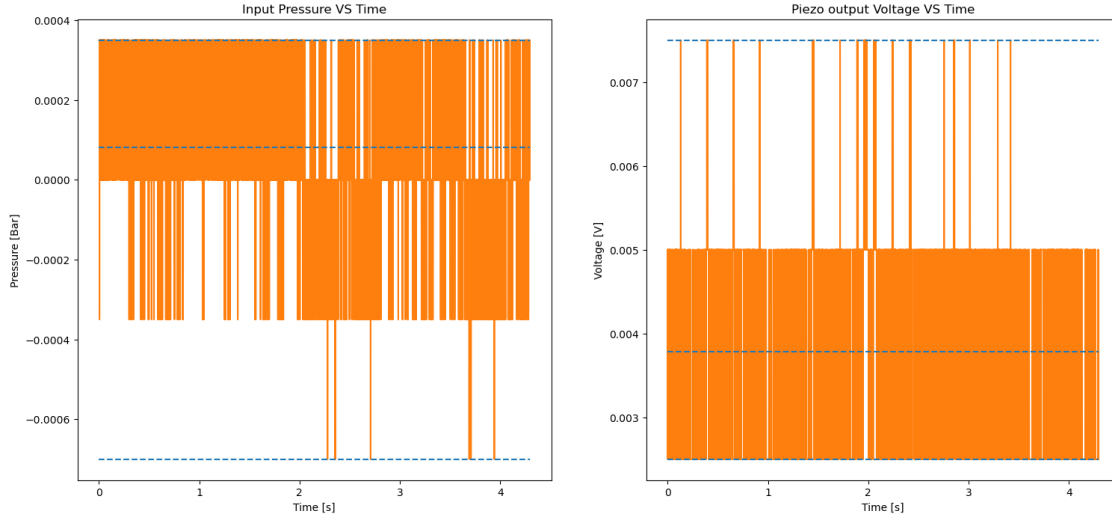
Sample name: AB-211206-085-ZNO

	Parameter	Value	Unit
0	Sample name	AB-211206-085-ZNO	
1	Measure duration	4.294967296	[s]
2	Rload	1000000.0	[Ohms]
3	Nb Periods	3.0	[1]
4	R Circuit	1.0	[Ohms]
5	Max Frequency	164.0	[Hz]

2 PRESSURE AND VOLTAGE MEASUREMENTS

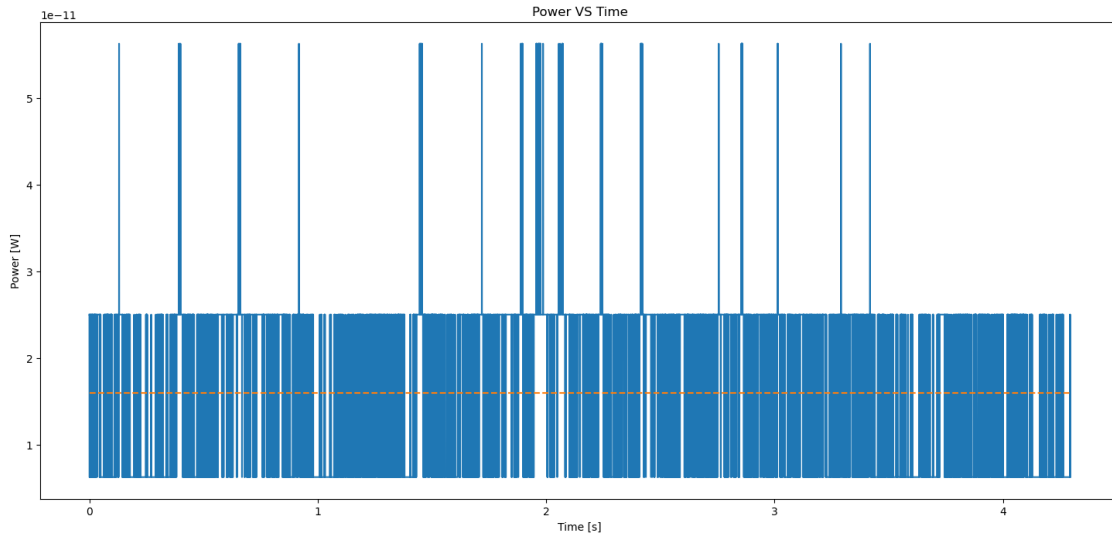
The input frequency is: 0.70 Hz





	Variable	Min	Max	Peak to peak	Mean	Mean of absolute value
0	Pressure [Bar]	-7.00e-04	3.50e-04	1.05e-03	8.10e-05	1.58e-04
1	Voltage [V]	2.50e-03	7.50e-03	5.00e-03	3.78e-03	3.78e-03

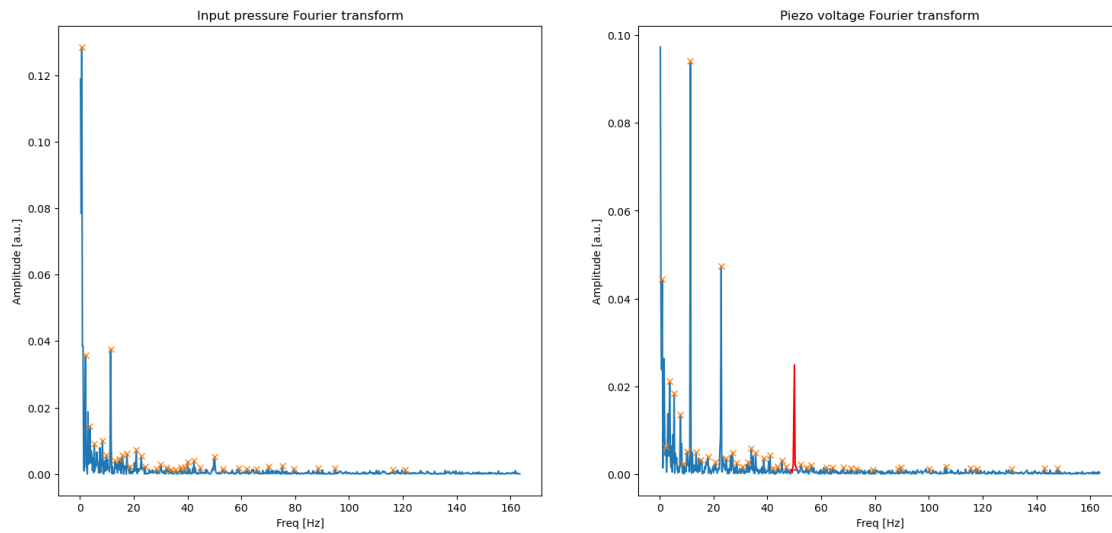
3 POWER



Mean power: 1.59e-11 [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	0.93	4.44
1	2.33	0.62
2	3.73	2.11
3	5.36	1.84
4	7.68	1.36
5	8.85	0.23
6	10.25	0.52
7	11.41	9.41
8	13.51	0.49
9	15.13	0.32
10	17.93	0.39
11	20.72	0.27
12	22.82	4.73
13	24.68	0.35
14	27.01	0.48
15	28.64	0.26
16	30.74	0.16
17	32.83	0.27
18	34.00	0.58
19	35.63	0.48
20	38.65	0.35
21	40.98	0.43
22	42.14	0.14
23	43.77	0.16
24	45.40	0.31
25	47.03	0.17
26	52.39	0.21
27	54.49	0.16
28	56.35	0.20
29	61.94	0.16
30	64.27	0.15
31	68.22	0.14
32	71.02	0.13
33	73.11	0.12
34	79.17	0.10
35	88.48	0.11
36	89.65	0.14
37	100.12	0.13
38	106.41	0.18
39	115.49	0.14
40	118.05	0.12
41	130.86	0.11
42	142.97	0.14
43	147.86	0.14

4.2 Pressure frequency peaks

	Freq [Hz]	Amplitude percentage
0	0.70	12.85
1	2.10	3.57
2	3.73	1.44
3	5.36	0.91
4	8.38	1.01
5	9.78	0.57
6	11.41	3.76
7	13.04	0.40
8	14.67	0.45
9	15.83	0.56
10	17.46	0.61
11	18.63	0.23
12	20.96	0.74
13	22.82	0.55
14	24.22	0.22
15	28.41	0.14
16	30.04	0.29
17	32.13	0.20
18	33.76	0.14
19	35.63	0.13
20	37.49	0.20
21	38.89	0.20
22	40.05	0.36
23	42.38	0.40
24	44.71	0.19
25	50.06	0.52
26	53.09	0.15
27	59.14	0.17
28	61.94	0.16
29	65.66	0.15
30	70.09	0.23
31	75.21	0.25
32	79.40	0.16
33	88.48	0.18
34	94.77	0.17
35	116.42	0.13
36	120.85	0.14