

Hey Hamza,

i've found the agilent script(s). The one you need is "agilent\_capture". You may have to install some dependencies, but I think you'll figure it out.

It's actually fairly easy (if it works at all):

- Get a device under test. Like a RC circuit of known impedance and put it in the fixture
- Configure the impedance spectrometer on the display (note the amount of datapoints you want to capture, maximum is 801)
- Time a sweep with your smartphone (that's the sampletime)
- configure the script
  - set a total duration of all measurements (duration). Usually the time of gasmixer run). For testing purposes maybe 5\*sampletime
  - set the points per spectrum (e.g. 801)
  - set the sampletime in seconds (i don't really know what the comment means with min 500 and the value is set to 6. No idea.... Also note that the constructor initializes this value with 1000 in measurement.py. Maybe you have to play around with this one)
  - Start the script
- The agilent will turn on the "rmt" LED
- Hopefully it will start to capture the spectra
- After the total duration has elapsed, there should be a \*.h5 file in the data folder. This file hopefully contains some impedance spectra. Someone at lmt should show you how to open hdf5 files. I don't know what will happen if the script is aborted or crashes. It may corrupt the file. In measurement.py is some code to control the measurement during the run. If possible you should always use the control keys to abort a measurement to prevent data corruption, but I don't know if they work at all. I don't remember...
- Done.

Easy right? But for real, I would be surprised if it works out of the box. You probably have to do some testing and maybe bugfixing.

Hopefully it helps. If you have questions, feel free to ask. Worst thing that will happen, is that we have to figure it out together on Thursday.

Regards

Henrik