# Python Control of Smart Plugs

This is an article started by Russ Hensel, see "http://www.opencircuits.com/index.php?title=Russ_hensel#About My Articles" About My Articles for a bit of info. Still polishing up this page.

Contents [hide]



## Introduction/Status [edit]

**Purpose:** This is a Graphical User Interface Application (actually two applications ) is to control TP-LINK HS110 Smart Plug w/Energy Monitoring (***TP-LINK HS110 Smart Plug w/Energy Monitoring - - Amazon.com**) graph and otherwise process the data. The application uses the pyHS100 library code. It should work on Windows, Mac, Linux, and the Raspberry Pi. It does require at least Python 3.6 as it uses f-strings ( print( f"evaluate this{1+1}" )

**Program Status:** ( Program now Ver7 ) More or less beta, seems to work fairly well if not stressed. Intended for those with some Python experience who can add the files to their Python development environment ( no install features for this code ). Some dependencies will need to be installed, probably prompted by error messages. Editing of the parameter file should be easier for those with Python experience. Users should find some useful documentation in the code, this is still a work in progress. Much code has been lifted from other projects of mine, some artifacts remain.

**This Page Status:** This page is the "master" page for the project, all other pages link back here, either directly or indirectly. Pages are drafts, but worth reading if you are trying to use the program.

**Help File:** Including install and configuration. SmartPlug Help File. Screen shots and more at: **SmartPlug GUI Images**.

**More Documentation:** See links below, and code ( **russ-hensel/Smart Plug Repository** )

## Graphical User Interface [edit]

Like to see what the interface, the gui, looks like see: *SmartPlug GUI Images

## Help "file" for the Program [edit]

Not a file but a page on this Wiki, this includes information on Download and Install, see: **SmartPlug Help File** Note that the wiki pages as pdf files may be found in .\wiki_etc, but these sometimes lag the online versions.

## Python Code [edit]

Available at:

- **russ-hensel/smart_plug: Program Source**
- Directory Structure
  - .\ all executable python code
  - .\wiki_etc supplementary documentation, in particular this wiki's pages as pdf's.

## Program Design [edit]

See: SmartPlug Technical

## Links [edit]

### In this Wiki [edit]

- SmartPlug Help File
- SmartPlug Technical
- SmartPlug GUI Images
- Click on Python SmartPlug Category below

### The Internet [edit]

#### General [edit]

- **pyHS100 · PyPI**
- **GadgetReactor/pyHS100: Python Library to control TPLink Switch (HS100 / HS110)**
- **pyhs100 – PCEasies**
- **There's now a pyhs100 library/utility that works pretty nicely out of the box. ... | Hacker News**

#### Matthias Random Stuff and Related [edit]

Matthias's youtube videos originally informed me about the SmartPlugs.

- **Refrigerator heat pump efficiency test - YouTube**
- **(54) Refrigerator heat pump efficiency test - YouTube**
- **Refrigerator heat pump efficiency**
- **Of dehumidifiers, moisture and vapour barriers - experiments**

#### Amazon [edit]

Of course there are other sources.

- **TP-LINK HS110 Smart Plug w/Energy Monitoring - - Amazon.com**
- **TP-Link Mini WiFi Smart Plug, Wi-Fi, Compatible with Alexa, Only Occupies one Socket (HS105), Wall-Light, Electronic-Component-switches, 1-Pack (Renewed) - - Amazon.com**

#### Youtube Not Involving Python [edit]

Or maybe some Python ??

- **(54) ESP8266 Smart Power Plug: Control and Monitor device from Internet - YouTube**
- **(54) TP-Link Wi-Fi Smart Plug with Energy Monitoring Introduction Video - YouTube**
- **(54) How to use a smart plug - YouTube**
- **TP Link Smart Plug (HS100) Review - YouTube**
- **TP Link Mini (HS105) vs Belkin Wemo Mini Smart Plug - YouTube**
- **(54) How to Reset TP Link HS100/HS110 Smart Plug - YouTube**
- **(54) TP-Link SMART PLUG REVIEW - HS100 / HS110 Unboxing, Review, HowTo, Kasa, Alexa Tutorial - YouTube**
- **(54) TP-Link Smart Wifi Plug Mini Review - Kasa Smart HS105 Setup - YouTube**
- **(54) TP-Link Smart Wi-Fi Plug Review - Controlled by Google Home - YouTube**
- **(54) TP-Link Wi-Fi Smart Plug with Energy Monitoring Introduction Video - YouTube**
- **(54) TP-Link HS100 WiFi Smart Plug [Unboxing and Setup - YouTube ]**
- **TP Link Smart Plug Mini (HS105) Review - YouTube**
- **(54) TP-Link SMART PLUG REVIEW - HS100 / HS110 Unboxing, Review, HowTo, Kasa, Alexa Tutorial - YouTube**

Categories: Python Projects | Python SmartPlug | Python

  