Activation of a portable dehumidifier in total self-consumption using a Smart Plug RC

The wireless sockets **Smart Plug RC** — combined with the **Elios4you Smart system** — can be used to automatically activate electrical loads depending on the energy available from the solar PV system, thus **maximising your self-consumption capacity**.
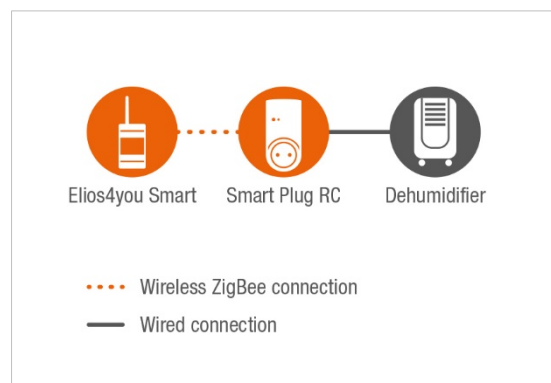

Fig. 1: Connection diagram - Elios4you Smart, Smart Plug RC and dehumidifier

The "Elios4you" App allows you to manage the Elios4you Smart device and its "Smart RC" wireless accessories using your smartphone.

Portable dehumidifier compatibility check

Make sure the dehumidifier goes regularly back to the schedueld program / configuration in case of power outage.

1) Switch the dehumidifier on and set the operation mode
2) Unplug or turn the circuit breaker off for a few minutes
3) Plug the power cord into the wall outlet or turn the breaker back on
4) After restart, check if the device goes to the earlier operation mode

Operating modes

Pair the Smart Plug RC with the Elios4you smart system[1] and operate it with the "Elios4you" App on your smartphone.

Choose one of the following operating modes to maximise the usage of clean energy:

- **Auto:** set activation and deactivation thresholds depending on the surplus energy available
- **Timer:** define a daily / weekly program according to your needs

Application sample with a portable dehumidifier equipped with plug/socket

- Appliance: DeLonghi Tasciugo
- Power supply: 220-240 Vac; 50 Hz
- Consumption: 250 W

---

[1] Read this tutorial to add one or more wireless "Smart RC" accessories to the Elios4you system (both single- and three-phase). For a first-time installation of the Elios4you Smart system, it is advisable to start with installation of the Elios4you Smart device.

4-noks products used

- Elios4you Smart
- Smart Plug RC

Setup procedure

1) Plug the Smart Plug RC into the wall outlet
2) Pair the Smart Plug RC with the Elios4you Smart system following the configuration wizard via App
3) Plug the dehumidifier into the Smart Plug RC
4) Switch the dehumidifier on; choose the operation mode and set the humidity degree
5) Set the wireless socket's parameters on the "Elios4you" App: define the thresholds to activate / deactivate the Smart Plug depending on the energy available for self-consumption
6) Choose one of the following operating modes:
    - **Auto:** define activation and deactivation thresholds depending on the surplus energy available
    - **Timer:** create a daily / weekly schedule according to your needs
7) Set the dehumidifier on the stand-by or ON mode using the remote control. The Elios4you Smart device will manage it according to the parameters previously defined.
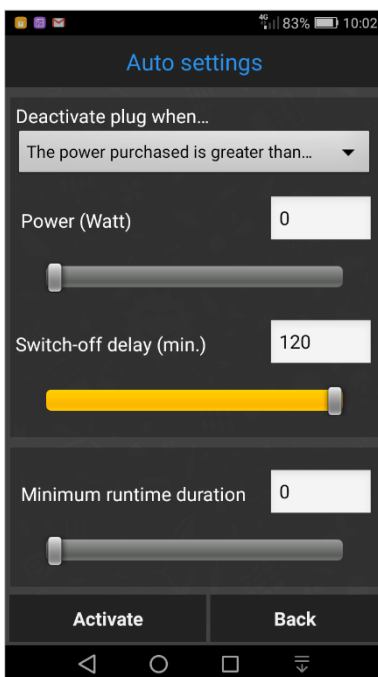

Fig. 2

Fig. 3

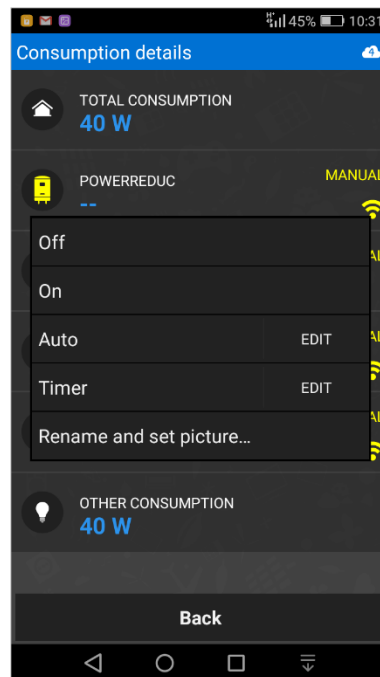## Note

Smart Plug RC exploits the dehumidifier's memory storage to go back regularly to the scheduled program in case of temporary power outage.