

## Smile User Manual

### Insight

*Your overall energy consumption at your fingertips.*



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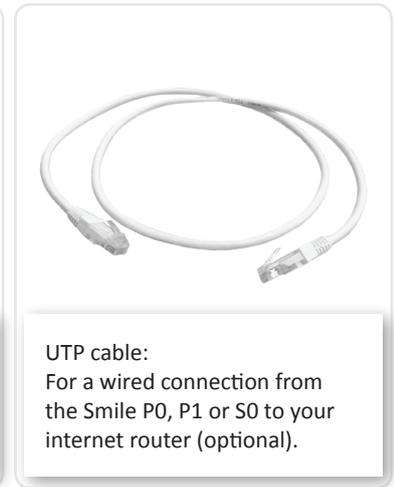
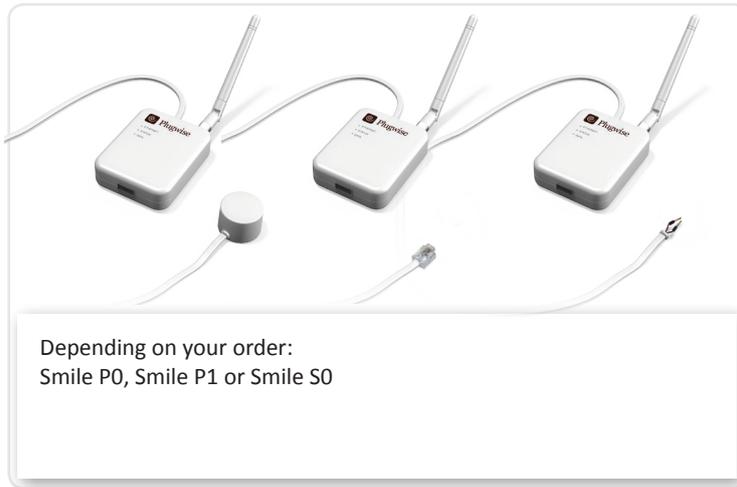
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In addition to reading smart meters with the current Smile P1, Plugwise offers two capable new measurement solutions to measure meters for different quantities worldwide: The Smile P0 and S0. This removes uncertainty about energy consumption due to a lack of information.

With the Smile, you get current\* and historical information on your total energy consumption via the Plugwise Source software on your (Windows) PC or via the Plugwise app on your smartphone, tablet or computer.

## Contents of your package

Depending on your order, your package will contain a Smile P0, P1 or S0 as an energy meter. Verify that the packaging for your Smile contains the following items:



The Smile is provided with an antenna\*\* and a cable to connect to the energy meter. The choice of the type of cable (and type of Smile) depends on the type of energy meter. The antenna provides a connection with your home WiFi network. You can also connect the Smile to your home LAN network with the UTP cable.

There is a sticker on your Smile with two codes. This sticker gives the 'Smile ID' (large 8-letter code) and the SSID (configuration network name for the Smile itself) that you need for the installation.

\* Depending on your energy meter:

\*\* If the antenna is not yet installed on the Smile, screw it securely to the thread protruding from the top of the Smile.

## How does it work?

 Step  
**1**

### Mounting the Smile

Hang up the Smile in your meter cabinet. Ensure that the Smile is placed no more than 1 meter away from your energy meter and no more than 1 meter from a free electrical outlet.

## How does it work?

 Step  
**2**

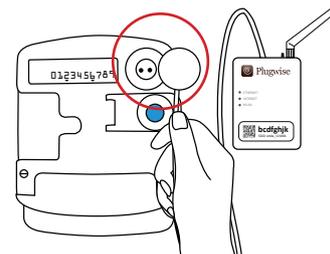
### Connecting the Smile

Connect the Smile to your energy meter. Then connect the adapter to the Smile and plug it into the electrical outlet.

## Smile P0

Connect the Smile P0 to the meter by connecting the round head on the cable to the optical port. This will be held in place by a magnetic coupling. Ensure that the P0 head is placed such that the wire hangs straight down.

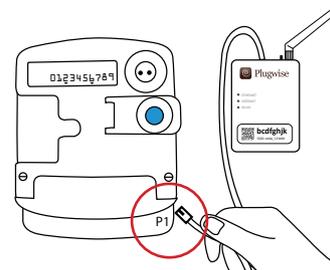
*Smile P0 limitation: It is possible that your P0 meter is an exception and it is not automatically supported after installation. On page 21, you can read whether your energy meter is compatible with the Smile P0 and the service that Plugwise offers to support multiple energy meters with the Smile P0.*



## Smile P1

Connect the Smile P1 to the meter by plugging the P1 cable from the Smile into the P1 port of the smart meter.

*Smile P1 limitation: The Smile P1 reads the P1 telegram from the meter. Plugwise supports the DSMR 2 telegram and higher. The DSMR 4 telegram is also supported from firmware version 2.0.20.*



## Smile S01

**We recommend having the Smile S0 installed by a certified installer! Attention: S0 wires from the Smile may only be connected to a S0 output in accordance with DIN 43864 or EN 62053-31.**

During the installation, the installer will connect the S0 cable in the correct direction to the sealed part in the main meter or to a separate kWh meter: The black cable must be connected to the minus (-) pole and the red cable to the plus (+) pole.

*Smile S0 limitation: The Smile S0 reads the S0 pulse output S0 class A (24VDC) from your S0 pulse meter.*

## For the installer

### Connecting the Smile S0

**We advise having the Smile S0 installed by a certified installer! Attention: S0 wires from the Smile may only be connected to a S0 output in accordance with DIN 43864 or EN 62053-31.**

### Smile S0

To be able to measure consumption or production, the cable for the Smile S0 is connected to the pulse output of the meter to be read. The S0 cable must be connected in the correct direction with a threaded connection.

Explanation of S0 cable variants:

Colour codes	Cable			
Smile	Black	Red	Green	Yellow
S0	Neutral	Pulse 1	n/a	n/a
S03	Neutral	Pulse 1	Pulse 3	Pulse 2
S0 2x2	Neutral	Pulse 1	Status/rate	Pulse 2

Attention: the Smile S01, S03 and S0 2x2 can be connected to the S0 pulse output S0 class A (24VDC) of your S0 pulse meter. See also the installation manuals for the Sub 803 and Strong ES-32 for the Smile S0 variants on the pulse meters to be read: [www.plugwise.com/support](http://www.plugwise.com/support)

## How does it work?



### Connecting the Smile to your network

Connect the Smile to your network. **Ensure that your telephone, tablet or computer are connected to the same network as the Smile.** We recommend connecting the Smile via LAN for a simple and constant connection with your network.

The Smile can be set up via any web browser without the need for the Plugwise Source software or the Plugwise app. Each Smile has a graphical user interface that is easy to access via the individual IP address of the Smile. It is important that the Smile is set up in the interface correctly for later use in the Plugwise software or app\*.

#### Connecting the Smile via LAN (wired connection)

Set up Smile via the wired connection, without app:

1. Connect the network cable between the Smile and your router.
2. Connect the Smile to the energy meter.
3. Connect the adapter to the Smile and plug it into the electrical outlet.

#### Connecting the Smile using WPS\* via WLAN (wireless)

Set up Smile on your WiFi network, without app:

1. Connect the Smile to the energy meter.
2. Connect the adapter to the Smile and plug it into the electrical outlet. Wait 1 minute until the Smile has started up and the "Status" and "Data" lights blink slowly\*\*.
3. Press 1 or 2 seconds the reset button on top of the Smile and wait approximately 10 seconds until "Status" is turned off and "Data" continues to blink swiftly.
4. Then press the WPS button\*\*\* on your router to connect your Smile via WiFi. The WPS button can be recognized simply by the symbol  or the text WPS at the button.
5. After the Smile has connected with the router, the Smile shall automatically restart with the obtained WiFi settings. In the event that after two minutes still no connection is made, the Smile will be automatically set back to the sign in mode.

\* Possible from Smile firmware version 2.0.48.

\*\* The WiFi network of the Smile is now in 'access point' mode. This means that you can connect directly with this WiFi network, or can connect the Smile via WPS with your own network. To switch the Smile to this mode, reference is made to page 13 – Reset your network connection.

\*\*\* The Smile only supports WPS connection through a special WPS button on your router. It is not possible to connect the Smile WPS with your router through a, especially for that purpose meant pin code.

## How does it work?



### Connect the Smile to your network

In case your router does not dispose of the possibility to connect using WPS, you can connect your Smile also via WiFi.

### Connecting the Smile via WLAN (wireless)

Set up Smile on your WiFi network, without app:

1. Connect the Smile to the energy meter.
2. Connect the adapter to the Smile and plug it into the electrical outlet. Wait 1 minute until the Smile has started up and the Status and Data lights blink slowly.
3. Connect your telephone, tablet, or computer to the WiFi network that is stated on the sticker on the Smile (after SSID). You password is the ID code of your Smile (printed in boldface).
4. Go to <http://192.168.40.40/> in the web browser on your telephone, tablet, or computer. Enter the username (smile) and the password for your Smile (boldface ID code).
5. The HTML interface then opens. Go to Settings .
6. Select the wireless network with which you want to connect the Smile and use this to connect after entering the password for your network. The HTML interface is now no longer available. Connect your telephone to your own network again.

### Connect with the Smile in your own network

<https://smile.plugwise.net/>:



You can now access the Smile via your own network (<https://smile.plugwise.net/>), if you do not install the Plugwise app or Source software for this (step 4). Enter the ID code for the Smile. You can find this on the double sticker on the Smile provided with a code printed in boldface. Ensure that your telephone, tablet or computer are connected to the same network as the Smile. More information about the HTML interface can be found under “Using the HTML interface”.

## How does it work?



### Install the Smile

Install the Smile in the Plugwise Source software on your (Windows) PC or the Plugwise app on your smartphone, tablet or computer for a complete overview of the meter data. Check in the HTML interface whether updates are available for your Smile and install them before you install the Smile in the app or Source. For more information, see page 15.

### Installing the Smile in Source (from 2.24)

1. Download Source and install the software. The Source software is available via our website [www.plugwise.com/source](http://www.plugwise.com/source). You need a Source licence\* to be able to use Source.
2. Open the Configuration Wizard after you have installed Source. To do this, go from the start menu on your PC to Programs, Plugwise Source, Configuration Wizard.
3. Go through the Configuration steps. You can skip steps that do not apply to you.

Are you already using Source? If so, install the Smile using the main menu and click on “Add meters” to add the Smile.

### Installing the Smile in the app\*\*

Install the Smile in the Plugwise app

1. Download and install the app. You can download the app via [www.plugwise.com/app](http://www.plugwise.com/app). You can also go directly to Google Play or the App Store to download the app.
2. Once the installation is finished, open and install the app. Follow the installation steps in the installation process.

Are you already using the app? If so, install the Smile via the main meter tab (if you have the Smile connected to a main meter) or via the switch tab (if you have the Smile connected to a device).



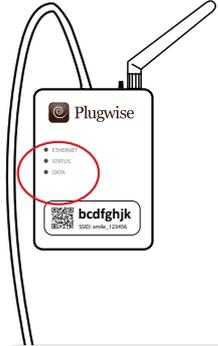
1. Main meter
2. Device

\* If you do not have a Source licence, contact Plugwise.

\*\* When you install the Smile via the app, you will automatically reach the step to set up the Smile via the HTML interface (only applicable to the Smile P0 and S0). For this, the Smile must be able to connect to the internet.

## Meaning of the LED-lights on the Smile

### Installing the Smile



The Smile has 3 LED-lights of which the features will be explained hereunder. The 3 lights will be listed from top (side of the antenna) to bottom (side of the connection).

Tip: To view clearly which lights are on or off, you can tilt the Smile a little, so that you view (against the long sides) just over the top.

Ethernet  Off  
 Status  Off  
 Data  Off

The Smile is off. Connect the adapter and plug the wire in the electrical outlet.

Ethernet  Off  
 Status  Flashing slowly  
 Data  Off

The Smile is now starting up, this will take approximately 90 seconds.

Ethernet  Off  
 Status  Flashing slowly  
 Data  Flashing slowly

The Smile can now be configured via WiFi to connect with your own network. Reference is made to page 21 to access this mode manually.

Ethernet  Flashing slowly  
 Status  On  
 Data  Off

De Smile staat aan en is verbonden met een LAN kabel.

Ethernet  Off  
 Status  On  
 Data  Flashing slowly

The Smile is on and configured to connect with your WiFi network, but cannot get a connection. Please check the Smile antenna, or the settings of your router. If you change the settings of your router, please follow the steps to re-install the Smile.

Ethernet  Off  
 Status  On  
 Data  Flashing quickly

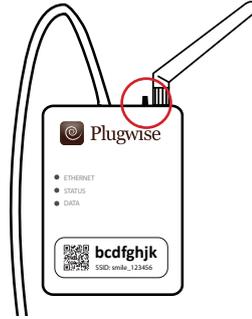
The Smile is on and is connected to a WiFi network.

## Reinstalling the Smile

### Network connection

If you have set the network connection of the Smile incorrectly or if you want to set the network connection on the Smile differently, you will need to reinstall the Smile.

This can be done by pressing the button on the Smile, release when the “Data” light flashes rapidly (for 4 to 7 seconds)



When should you reset the internet connection for your Smile?

- You do not want to connect the Smile to your LAN, but to your WiFi network, or vice versa.
- You have a new network router (with a new SSID or password)
- (WiFi) You have entered an incorrect password or selected an incorrect network.
- (WiFi) You have changed the security settings of your router (such as a different security method or a different password)
- (WiFi) You have changed the name (SSID) of your WiFi network

### Database

#### P0 and S0

If you want to connect the Smile to another meter and save the meter data as a new meter (the new measured values are then not added to the history of the first meter), you will need to install the Smile again and create a new meter.

#### S03 and S02x2

If you connect the Smile to another meter and want to save the meter data under a new meter (the pulses are now not added to the same meter), you will need to install the Smile again and create a new meter.

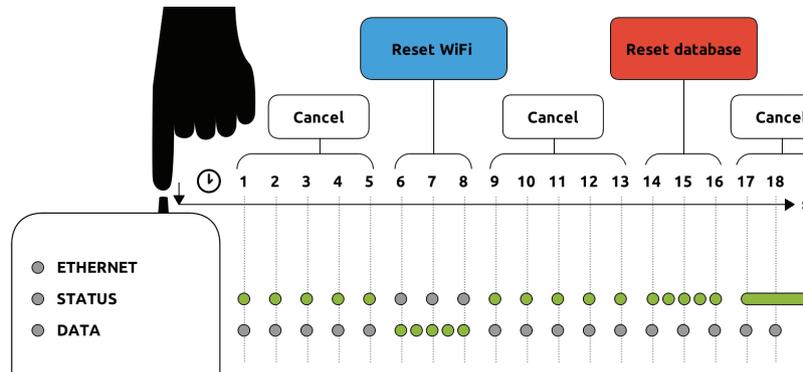
The Smile can be reinstalled by pressing the button on the Smile, release when the “Status” light flashes rapidly (for 14 to 17 seconds).



**Beware: This is a final recourse. With this you will erase all appliances and all the metering data of your appliances. We advise you to first call the helpdesk before you use this option.**

When should you reset the database of your Smile?

- You want to connect the Smile to a different meter, and not add the meter data to the historical data of the first meter.



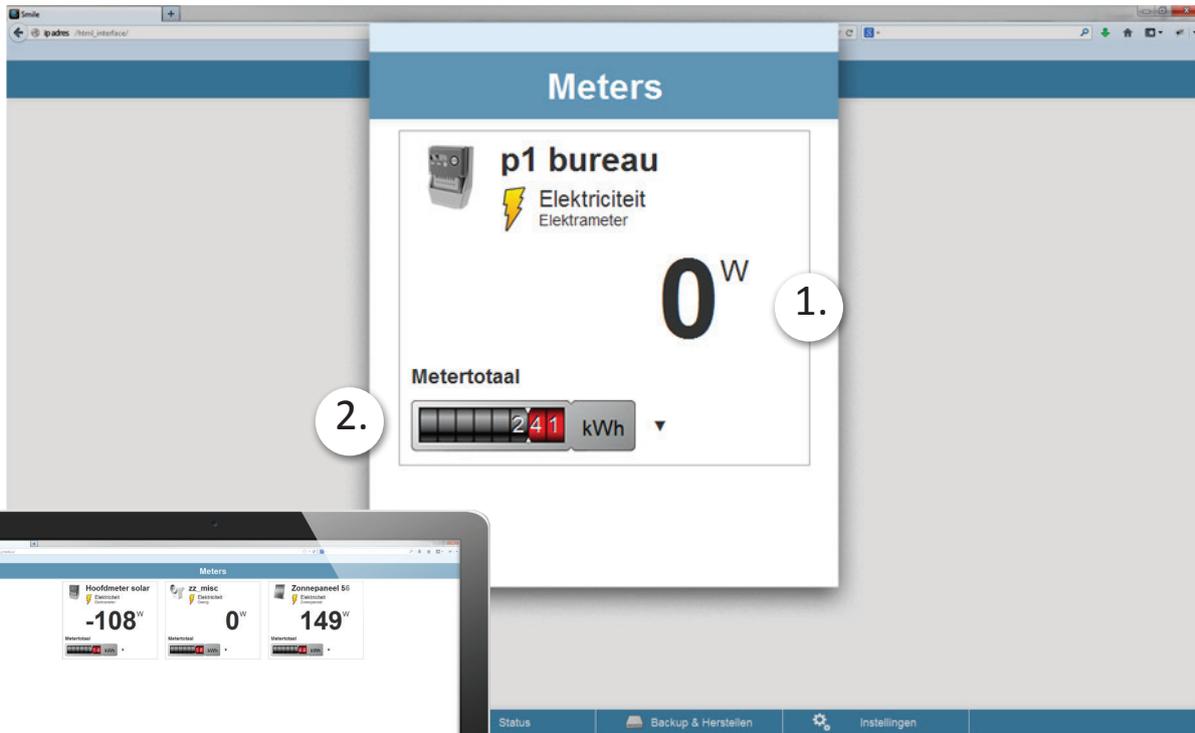
## Using the HTML interface



### Meters

After starting the interface, you will automatically go to the “Meters” screen (provided that you have configured the meter (settings)). You will see the current usage data from your meter or meters here\*. You can access the interface:

- Via <https://smile.plugwise.net/> step 4 (enter the ID code for your Smile here).
- The IP address of your Smile. You can find this in the Smile interface under “Status”.



1. Instantaneous consumption.\*\*
2. Total measured consumption. Click on the arrow at right for extra information.

\* The Smile S0 comes standard with 1 pulse output. Your Smile S0 can also be equipped with 3 pulse outputs. If the 3 pulse outputs are connected to different meters (for example for electricity (kWh), water or gas (m3)), more meters will be displayed in the “Meters” screen.

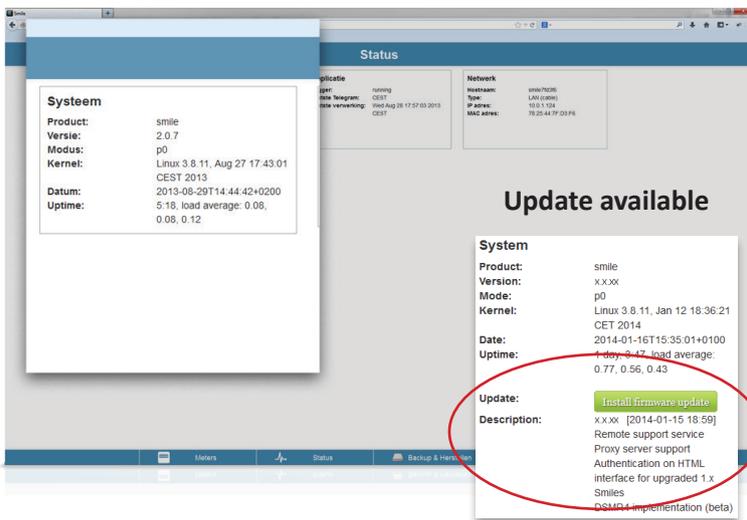
\*\* The current measurement values are only fetched via your Smile once every 10 seconds (P1), or calculated (S0 or P0 - if the meter does not report the current usage). There is therefore a short delay in the interface. Furthermore, the current values depend on the resolution of the meter. Take this into account!

## Using the HTML interface

### Status

Under “Status”, you will see an overview of the system, application and the network data.

Under “System” you can find the system data for the product connected, in this case one or more Smiles. If a firmware update is available for your Smile, you can find it here. A green button will appear which gives a description of the update. You can see whether the Plugwise system is active under “Application”.



The screenshot shows the 'Status' page with three main sections: System, Application, and Network. The 'System' section displays the following data:

Product:	smile
Version:	2.0.7
Modus:	p0
Kernel:	Linux 3.8.11, Aug 27 17:43:01 CEST 2013
Datum:	2013-08-29T14:44:42+0200
Uptime:	5:18, load average: 0.08, 0.08, 0.12

The 'Application' section shows:

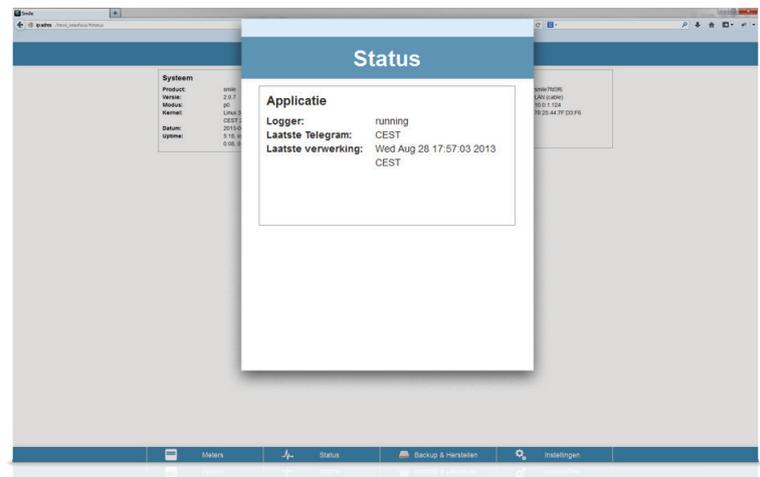
Logger:	running
Laatste Telegram:	CEST
Laatste verwerking:	Wed Aug 28 17:57:03 2013 CEST

The 'Network' section shows:

hostname:	smile7630E
ipaddr:	192.168.1.104
macaddr:	78:25:44:7F:03:F6

An 'Update available' notification is displayed in the center, with a red circle around the 'Install firmware update' button. The notification details are:

System	smile
Product:	x.x.xx
Version:	p0
Mode:	Linux 3.8.11, Jan 12 18:36:21 CET 2014
Date:	2014-01-16T15:35:01+0100
Uptime:	1 day, 9:47, load average: 0.77, 0.56, 0.43
Update:	<a href="#">Install firmware update</a>
Description:	x.x.xx [2014-01-15 18:59] Remote support service Proxy server support Authentication on HTML interface for upgraded 1 x Smiles OSM134 implementation (beta)



The screenshot shows the 'Status' page with the 'Application' section highlighted. The data is as follows:

Logger:	running
Laatste Telegram:	CEST
Laatste verwerking:	Wed Aug 28 17:57:03 2013 CEST

#### System:

- Product: the product that you have connected to read out your meter data (in the example a Smile).
- Version: the firmware version on your Plugwise product.
- Mode: type of product (P0/P1/S01, S03 or S0 2x2).
- Kernel: the operating system and the release date.
- Date: the date and time that are set on the Smile (you can change this via “Settings”).
- Uptime: the number of days that the Smile is used.
- When a firmware update is available, a green button will appear with which the Smile can be updated easily.

#### Application:

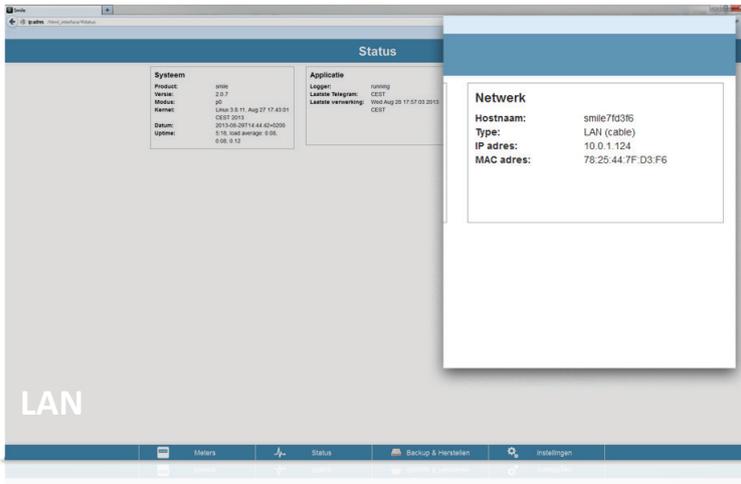
- Logger: Shows whether the data aggregation\* is running properly.
- Most recent telegram: The time at which the last telegram (measured value) was read out via the Smile.
- Most recent processing: The time at which the last telegram (measured value) was interpreted by the Smile.

\* Data structuring

## Using the HTML interface

### Status

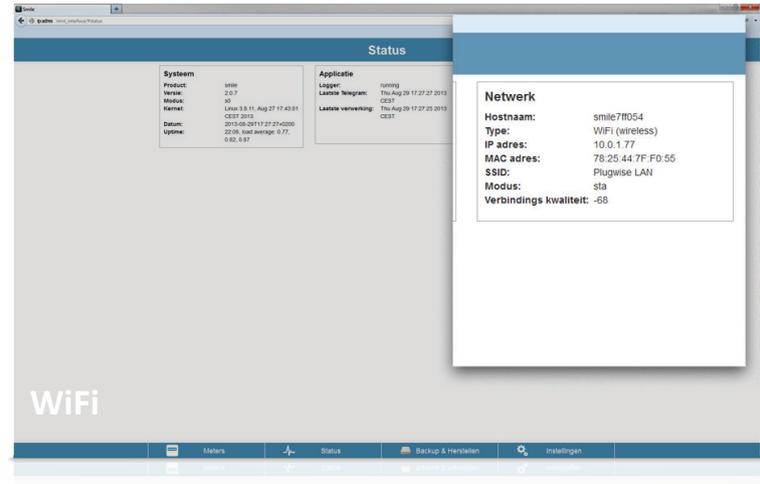
Under “Network” you can find exactly which network you are using to connect your Smile to the internet.



The screenshot shows the 'Status' page of the Plugwise HTML interface. A modal window titled 'Network' is open, displaying the following information:

Hostnaam:	smile7f03f6
Type:	LAN (cable)
IP adres:	10.0.1.124
MAC adres:	78.25.44.7F.D3.F6

The background shows system and application status details, and the word 'LAN' is displayed in large letters at the bottom left of the interface.



The screenshot shows the 'Status' page of the Plugwise HTML interface. A modal window titled 'Network' is open, displaying the following information:

Hostnaam:	smile7f054
Type:	WiFi (wireless)
IP adres:	10.0.1.77
MAC adres:	78.25.44.7F.F0.55
SSID:	Plugwise LAN
Modus:	sta
Verbindings kwaliteit:	-68

The background shows system and application status details, and the word 'WiFi' is displayed in large letters at the bottom left of the interface.

#### LAN network (wired connection):

- **Hostname:** This is the name under which you can find your Smile using your browser: In the address bar, type in *yourhostname.local*. Note: this works on any system, provided the “Apple Printer Service (Bonjour)” is installed on a Windows PC.
- **Type:** How the internet connection for your Smile is made, via a wired connection (LAN) or wireless (WiFi).
- **IP Address:** The IP address of your Smile. You can also type your IP address into the address bar to access your Smile.
- **MAC Address:** The MAC address of your Smile.

#### WiFi network (wireless):

- **SSID:** Name of the wireless network that the Smile is connected to.
- **Mode:** The Smile can be in client (STA) or access point (AP) mode.
- **Connection quality:** The connection quality of the wireless signal.

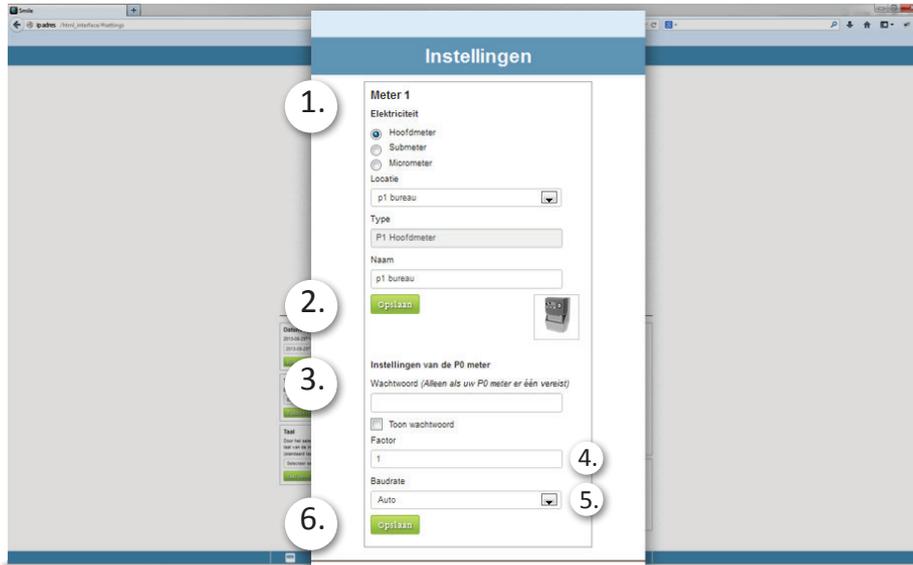
## Using the HTML interface

### P0 and P1 meter settings

You can indicate exactly what type of meter or what device is connected to your Smile under “Settings”.

For the Smile P0 and P1, you can indicate the level at which you are reading your meter at the top of the screen. By making the choice between main meter, submeter or micrometer (device level), you can indicate the level at which you are measuring (1). This is important in order to be able to use the Plugwise software of app as optimally as possible. Depending on the choice that you make here, options will appear to name the meter and the type of device. Save the settings by clicking on save (2).

Your P0 meter may require a password (3). In that case, you can enter the password under settings for the P0 meter. With an indirect meter where electrical transformers are used, the conversion ratio of the transformer must be known (primarily for commercial meters). This is seldom the same, as a result of which the display does not give the actual usage in this case (and therefore the data read by the Smile are also incorrect). The coil ratio is known to the network administrator that installed the meter. This ratio can be entered under “Factor” (4). The Baud rate (5) must be entered if this does not work according to the standard. Click save to save the settings (6).



1. Name your meter.
2. Remember to save the initial settings.
3. Set up the meter (optional), request the data from your network administrator.
4. Factor: the ratio between the coil ratio set on the meter and the actual coil ratio used (this is given by your network administrator).
5. Baud rate: - the speed of the optical serial communication between the Smile and meter if this is not working according to the standard.
6. Remember to save these settings as well.

## Using the HTML interface

### Meter settings for S0

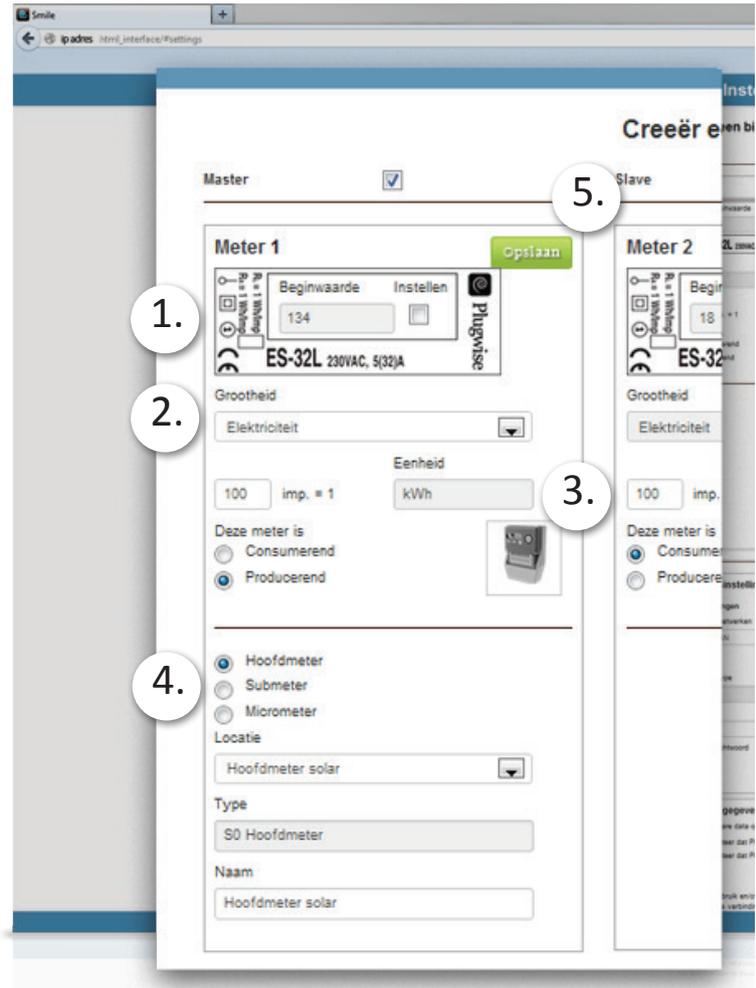
You can indicate exactly what type of meter or what device is connected to your Smile under “Settings”.

With the Smile S0, you can read the number of pulses counted by the Smile at the top of the screen (1).

Then indicate what the connected meter measures (quantity) (2). You can then indicate the number of impulses\* per unit (3). The unit is linked to the selected quantity (kWh/m<sup>3</sup>/GJ) and is entered for you automatically\*\*.

For the overviews in Plugwise Source and the Plugwise app, it is important to indicate whether the meter that is read out registers the consumption (e.g. your main meter) or shows your production (e.g. a solar panel).

Make a choice between main meter (e.g. for the energy meter), submeter (e.g. to measure a separate electrical circuit) or micro-meter (e.g. for a solar panel/air conditioner) to indicate the level at which you are measuring. This is important in order to be able to use the Plugwise software of app as optimally as possible. Depending on the choice that you make here, options will appear to name the meter and the type of device (4). Then click on save to “Save” at the top right of the screen to save the settings (5).



\* The number of impulses depends on your meter and is printed on the meter. The pulse value is usually indicated by the number:  $R = x [\text{unit}] / \text{imp.}$  (impulses). For example, if 1 Wh/imp is stated, this means that 1 pulse is equal to 1Wh, so 1000 imp. = 1kWh.

\*\* If a different unit is stated on your meter, you can process the conversion to the pulse value.

A Smile S03 is used in the example. With the Smile S03, it is possible to connect up to three meters or devices. If you use a Smile S01, only one will appear in your screen.

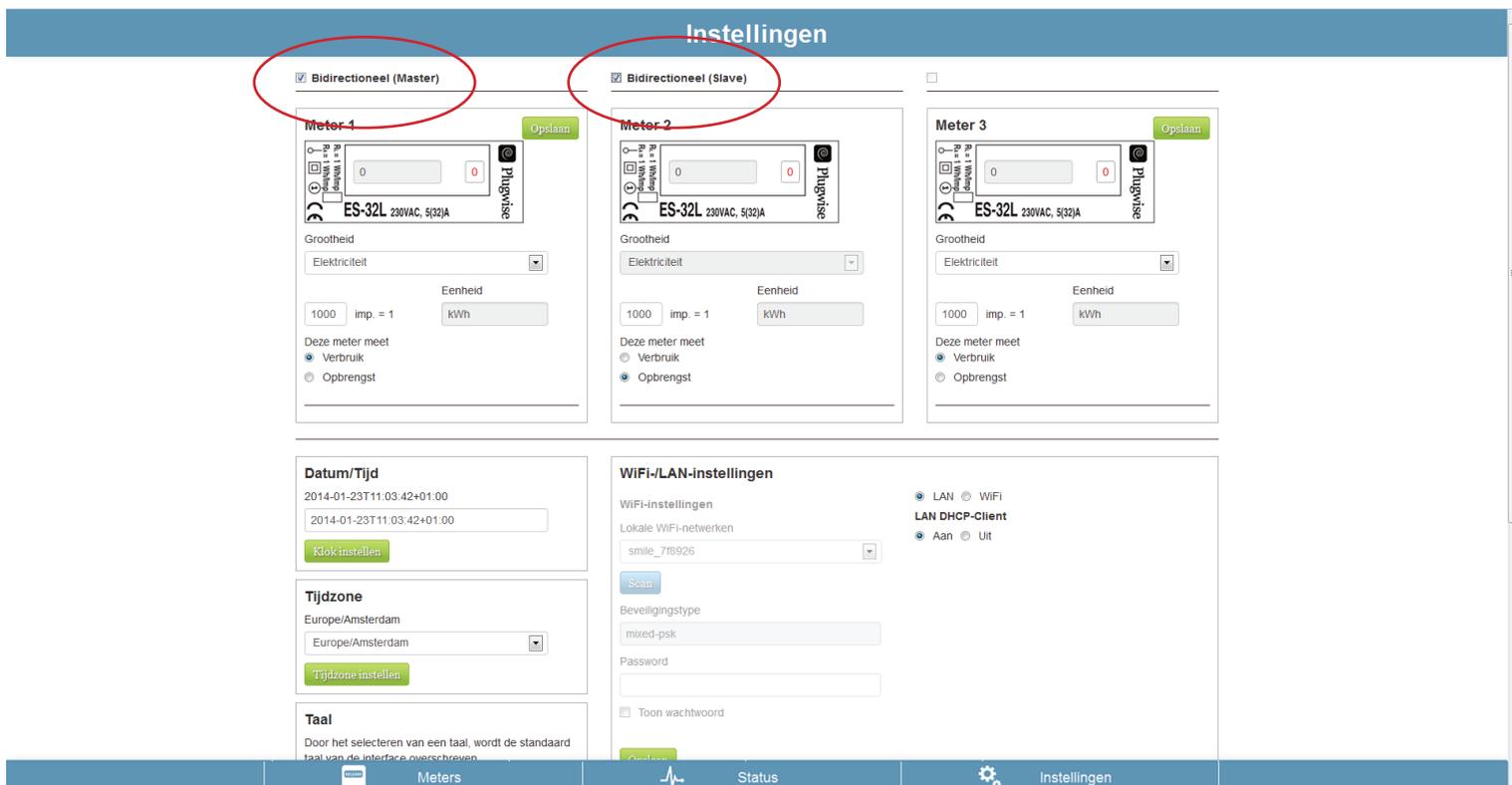
## Using the HTML interface

### Meter settings for extra S03

The Smile S03 can be connected to three different pulse outputs, where two of the three pulse outputs are shown in the HTML interface as one bi-directional system.

- This is possible by connecting two pulse lines to a bi-directional meter that registers both production and consumption, as is the case with the Sub 803.
- Or by connecting two pulse lines to two separate pulse meters that are connected in different directions, as is possible with the Strong-ES32.

It is then possible to indicate which pulse line registers the consumption (checkmark “Bi-directional (Master)” at the top of the screen) or the yield (checkmark “Bi-directional (Slave)” at the top of the screen) via the HTML interface.



The screenshot shows the 'Instellingen' (Settings) page for three meters. The 'Bidirectioneel (Master)' checkbox for Meter 1 and the 'Bidirectioneel (Slave)' checkbox for Meter 2 are circled in red. The interface includes sections for date/time, time zone, language, and WiFi/LAN settings.



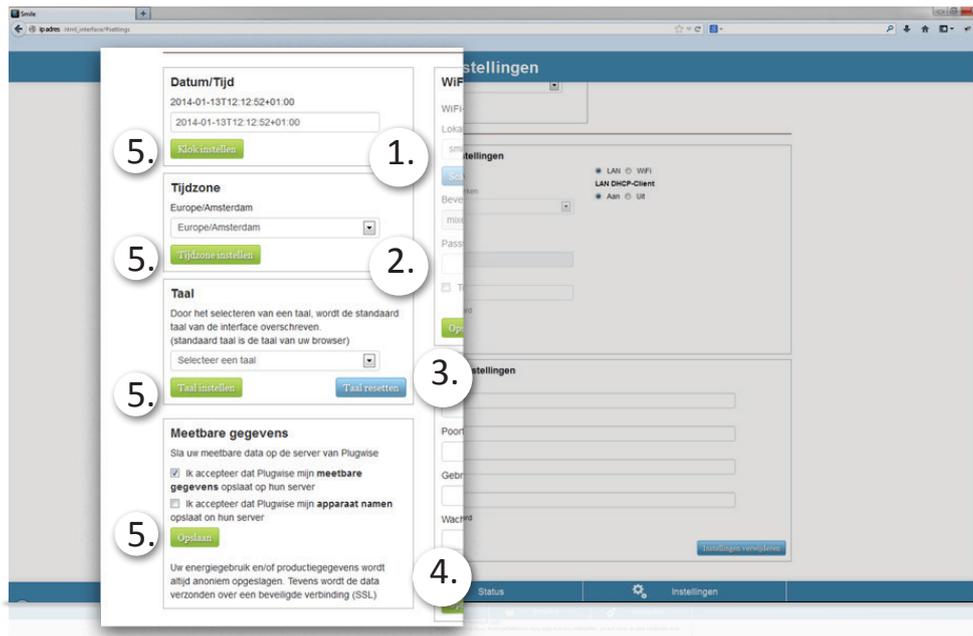
## Using the HTML interface

### Settings

Under “Date/time” you can set the clock yourself if this deviates from the automatically set time or if the Smile cannot get the time from the internet. Click on the bar in which the current time is indicated (1) and change this to the desired time. Then click on “Set clock” to save the new time (5).

Below that, you can set the time zone where the Smile is located. Select the correct time zone (2) and click on “Set time zone” (5). You can also set the language of the HTML interface that you prefer. Select the desired language (3) and click on “Set language” (5). When you use the HTML interface for the first time, this is set to the same default language as is set in your web browser. You can return to the original settings by clicking on “Reset”.

Under “Measurable data” (4) you can give Plugwise permission to save your meter data on the Plugwise server so that you can see your historical data using the Plugwise app. If you do not do this, you will not be able to see any graphs or forecasts in the app and/or software. You can also choose whether you want to save the names of your devices anonymously on the Plugwise server. This makes it possible to see the graphs linked to your devices in the app while you are out of the house.



1. Set the desired time.
2. Set the desired time zone.
3. Set the desired language.
4. Set the data to be measured.
5. Remember to save each step individually.

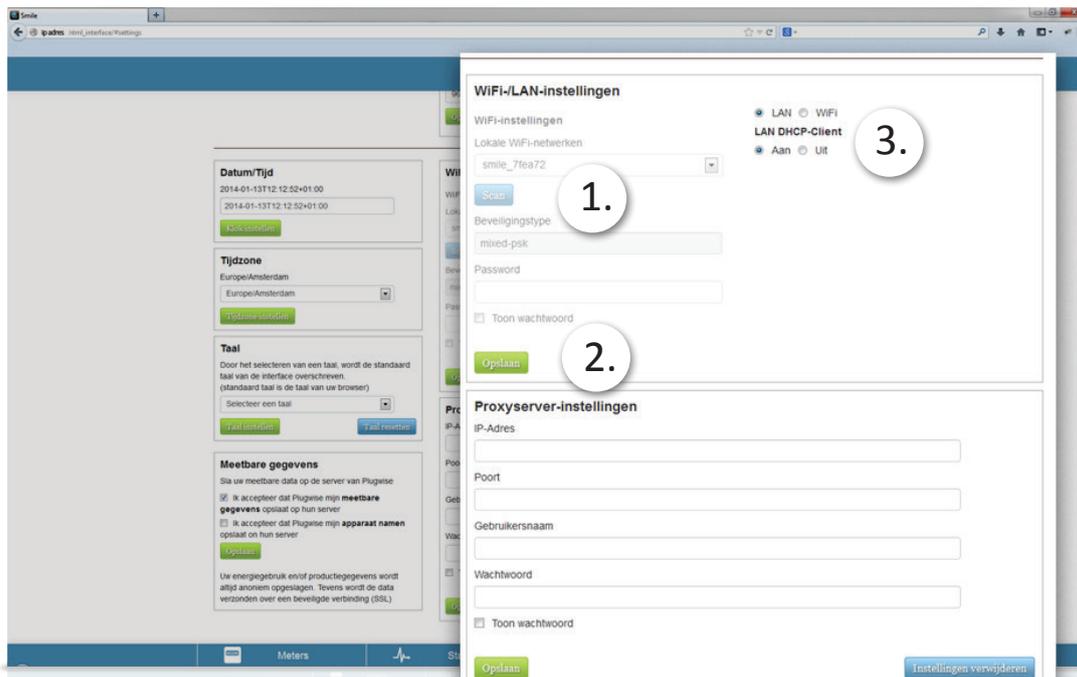
## Using the HTML interface

### Settings

Under “WiFi-LAN settings” you can see the network to which the Smile is connected. If you want to connect your Smile via another network, you can change that by changing the settings here.

Keep the name and password of your own WiFi network handy if you want to connect your Smile to your WiFi network. If your WiFi network does not appear in the list of “local WiFi networks”, first click on “Scan” (1) to find your network (make sure that WiFi is selected (3)). Note, it can take some time before the desired network is found and displayed. Once you have set up your data, click on “Save” (2) to save the settings.

After saving the new WiFi settings, the connection between the Smile and the internet browser will be lost. When the Smile and the computer, tablet or smartphone are connected to the same network, the Smile can be accessed via the internet browser again. It is possible that the Smile has obtained a different IP address depending on the settings used and the router for the network. You can check this under “Status”.



1. Click on “Scan” to find your WiFi network.
2. Remember to save your settings.
3. The Smile is set to DHCP network mode by default. This will cause the Smile to receive an IP address that is given by the router. If you want to give the Smile a fixed IP address, you can do this by selecting DHCP client “Off”.

## Using the HTML interface

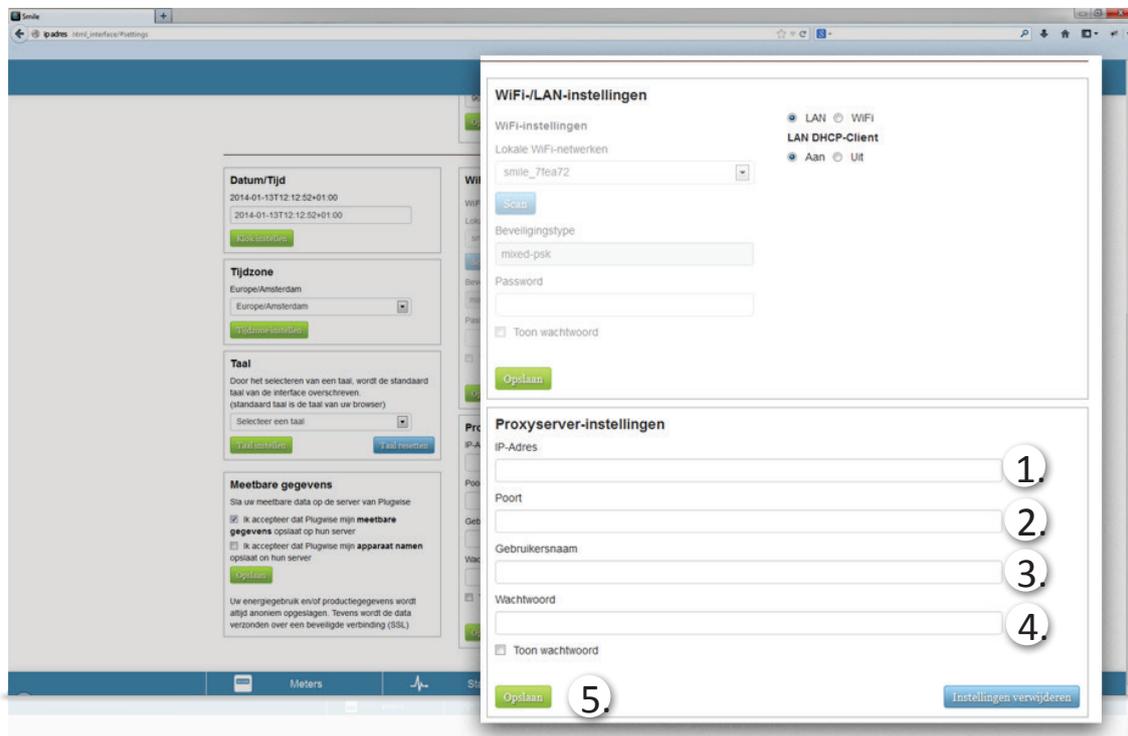
### Settings

If you want to connect the Smile within a business network, it may be that you use a proxy server for a WiFi or LAN connection. If you still cannot connect the Smile to the internet, the information for the proxy server is necessary:

- The IP address (1)
- The TCP port of the proxy server (2)

Your proxy server may ask for a username (3) and password (4). In that case, you can enter the username and the password under proxy server settings. If this does not apply to you, you can leave both blank.

Ask your network administrator for this information.



1. Enter the IP address of the proxy server.
2. Enter the TCP port of the proxy server.
3. If applicable: Enter the username for the proxy server.
4. If applicable: Enter the password for the proxy server.
5. Remember to save all your information.

## Information about Smile P0

### Does the Smile P0 work on your energy meter too?

If the Smile P0 does not recognise your P0 meter, Plugwise offers a service with which various P0 meters that are supported by Smile P0 can be added. You can check whether the Smile P0 is compatible with your energy meter\* yourself. The webpage where you can find the correct information is accessible via:

In the address bar, type in [yourhostname.local/system/status](http://yourhostname.local/system/status)

If you do not know the hostname for your Smile, this is easy to find by searching via the HTML interface, see page 1 for more information about the HTML interface. The interface can be accessed:

- Via <https://smile.plugwise.net/> step 4 (enter the ID code for your Smile here).
- The IP address of your Smile. You can find this under “Smile” in the Smile interface.

Go to ‘Status’ and then look under ‘Network’. After ‘Hostname’, you will find the hostname that you can enter in the place *yourhostname* in the internet address above.

You will be asked for your username and password before you can open this page. Enter the username “smile” and the password - the boldface ID code - for your Smile. Then click on “OK”.

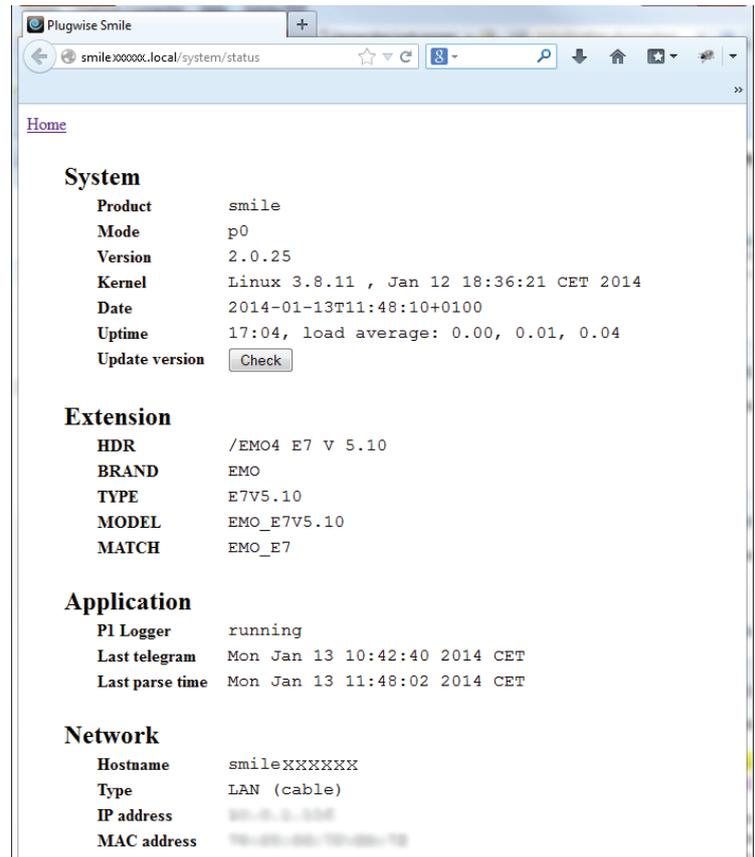
You then go to the web page where you can determine whether the Smile P0 recognises your energy meter.

Look under the heading ‘Extension’ for this

- “HDR” indicates what meter you have connected to the Smile P0.
- “MATCH” indicates whether the meter is recognised by the Smile. If the meter is not recognised, it will say “UNKNOWN” here.

If you have an unknown meter, please contact Plugwise. In that case, forward the information that you will find under ‘Extension’. In most cases, it is then possible to get the Smile P0 to support your P0 meter as well.

\* You can quickly find out whether your energy meter is already supported by the Smile P0 at <http://www.plugwise.com/nl/ondersteunde-p0-meters>.



The screenshot shows a web browser window with the URL `smile.xxxxxx.local/system/status`. The page content is as follows:

```

Home

System
Product      smile
Mode         p0
Version      2.0.25
Kernel       Linux 3.8.11 , Jan 12 18:36:21 CET 2014
Date         2014-01-13T11:48:10+0100
Uptime       17:04, load average: 0.00, 0.01, 0.04
Update version 

Extension
HDR          /EMO4 E7 V 5.10
BRAND        EMO
TYPE         E7V5.10
MODEL        EMO_E7V5.10
MATCH        EMO_E7

Application
PI Logger    running
Last telegram Mon Jan 13 10:42:40 2014 CET
Last parse time Mon Jan 13 11:48:02 2014 CET

Network
Hostname     smileXXXXXXX
Type         LAN (cable)
IP address   192.168.1.100
MAC address  78:25:66:70:88:78
  
```

## The Smile in Source

### Settings - New Source user

Use Plugwise Source for insight into your consumption. With Source, you have access to clear overviews, graphs, savings results and switching schedules\*. You must have Source 2.24 or later to be able to install the Smile correctly.

#### Step 1: Download Source and install the software

The Source software is available via our website: [www.plugwise.com/source](http://www.plugwise.com/source) Type the URL of the website in your browser address bar to go to the website. You need a Source licence to be able to use Source. Contact Plugwise if you do not have a licence yet. Install the software.

#### Step 2: Open the Configuration Wizard for Source

Once the installation is finished, open the Configuration Wizard for Source. To do this, click on the start menu on your computer and then click on "All Programs". Open the Plugwise Source folder and open the Configuration Wizard. Go through the configuration steps.



The image shows three sequential screenshots of the Plugwise Source Configuration Wizard.   
**Step 2A:** The 'Licentie' (License) screen. It instructs the user to find the 'Circle' (a grey sticker) and the 'Smile' (a small device). It includes a checkbox for 'Ik wil een Plugwise Smile toevoegen.' (I want to add a Plugwise Smile).   
**Step 2B:** The 'Smile ID' screen. It asks for the Smile ID and provides a QR code for scanning. It also offers an option to enter the IP address of the device.   
**Step 2C:** The 'Stroomtarief' (Energy Rate) screen. It prompts the user to enter current energy rates, including start and end dates, and rates for different consumption levels (e.g., 0.2300 €/kWh, 0.5000 €/kWh).

#### Step 2A:

Checkmark the option 'I want to add a Plugwise Smile' and click on "Next".

#### Step 2B:

Enter the Smile ID for the Smile that you want to connect. Attention, the Smile must already be connected and set up on the same local network where Source is running. Click on "Next".

#### Step 2C:

You then automatically go the rates screen\*\*. If this is not the case, click through manually until you reach the rates screen. Enter you current energy rates here. For accurate overviews, it is important that this information is entered as correctly as possible and updated when necessary.

\* You can only use switching schedules after you have expanded your Plugwise package with our switchable modules.

\*\* If you want to install more modules and/or meters in Source, you can do this via the settings menu in the software (see [Settings - Existing Source user](#)) or by going through the Configuration Wizard again to add the extra modules and/or meters.

## The Smile in Source

### Settings - Existing Source user

You can expand your overviews, graphs and savings results even further by adding the Smile to Source. You must have Source 2.24 or later to be able to install the Smile correctly.

#### Step 1: Go to Settings

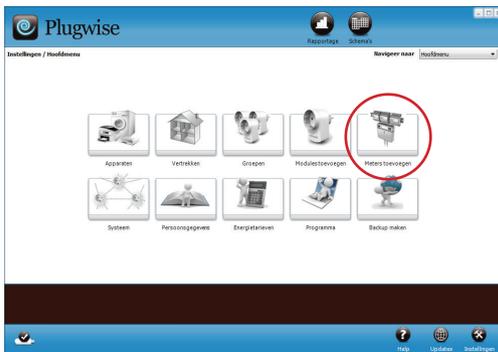
Click on “Settings” at the bottom right of the screen to go to the main menu of Source. Then click on “Add meters” to add the Smile.

#### Step 2: Enter the Smile ID

Enter the Smile ID and click on “Next”.

#### Step 3: Smile on screen

The wizard is closed and the “Devices screen” is opened. Within a few minutes, the meters of the Smile will appear on the screen.



#### Step 1:

Click on “Add meters” in the Settings main menu.



#### Step 2:

Enter the Smile ID for the Smile that you want to connect. Attention, the Smile must already be connected and set up on the same local network where Source is running. Click on “Next”.



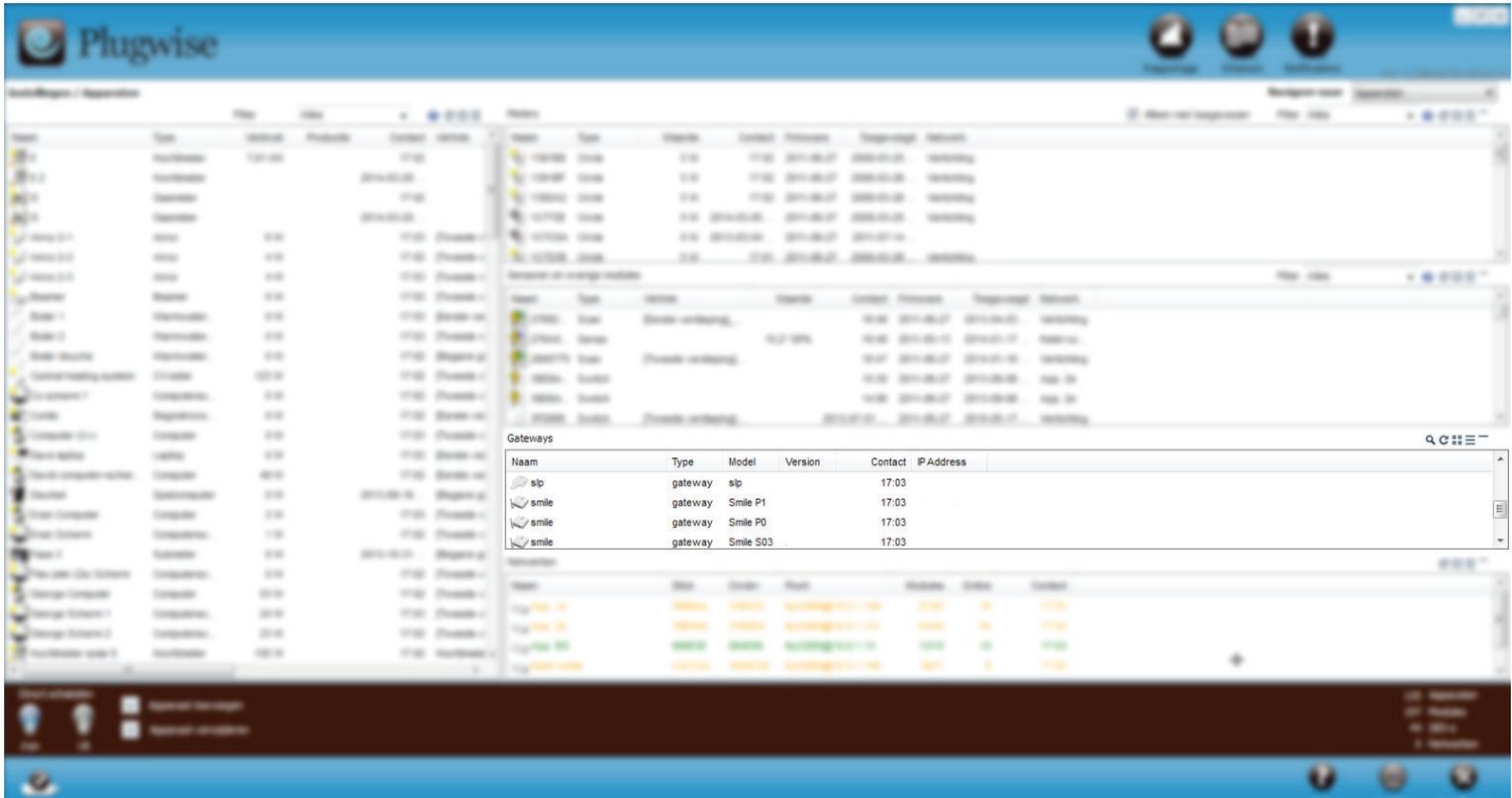
#### Step 3:

You are then automatically directed to the “Devices screen”. Remember to enter your rates via “Energy rates” in the “Settings” main menu.

## The Smile in Source

### Settings - Existing Source user

When you are using Source together with the Smile it is not possible to create new settings nor to change or to remove the settings for the gateway or of the appliances and or the locations set via the HTML interface of the Smile in Source. When you are using Source, you can only read out the Smile (read only).



The screenshot shows the Plugwise web interface. On the left, there is a tree view of devices. On the right, there are several data tables. The 'Gateways' table is highlighted, showing the following data:

Naam	Type	Model	Version	Contact	IP Address
slp	gateway	slp		17.03	
smile	gateway	Smile P1		17.03	
smile	gateway	Smile P0		17.03	
smile	gateway	Smile S03		17.03	

Under “Gateways”, on the right side of the screen, you can find the Smile. By double clicking the Smile will , the HTML page will be automatically opened

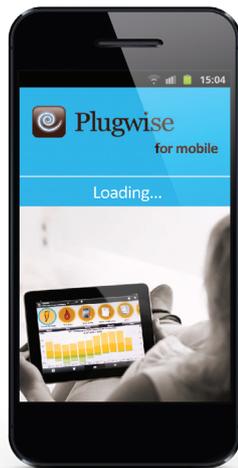
## The Smile in the Plugwise app

### Attention:

At present, you can configure a gateway for the main meter once (Smile) and a gateway for the submeters or micrometers (Stretch) once. Other configurations are not possible when using the Plugwise app.

You can use the Plugwise app with the configurations below\*:

- 1x Smile P1
- 1x Smile S0
- 1x Smile P0
- 1x Smile P1 (main meter) + 1x Stretch 2.0\*\*
- 1x Smile P1 (main meter) + 1x Smile S0 only connected to a submeter or device
- 1x Smile P1 (main meter) + 1x Smile P0 only connected to a submeter or device
- 1x Smile P0 (main meter) + 1x Stretch 2.0\*\*
- 1x Smile P0 (main meter) + 1x Smile S0 only connected to a submeter or device
- 1x Smile P0 (main meter) + 1x Smile P0 only connected to a submeter or device
- 1x Smile S0 (main meter) + 1x Stretch 2.0\*\*
- 1x Smile S0 (main meter) + 1x Smile S0 only connected to a submeter or device
- 1x Smile S0 (main meter) + 1x Smile P0 only connected to a submeter or device



Plugwise app



\* It is possible to install and use multiple Smiles in the Plugwise Source software.

At this stage the Smile S02x2 cannot be installed in the Plugwise app.

\*\* The Stretch 2.0 is a gateway that sends energy consumption data via your ZigBee and WiFi network to the Plugwise app on your smartphone, tablet or computer.

## The Smile in the Plugwise app

### Settings - New user

#### Step 1 - Go to [www.plugwise.nl/app](http://www.plugwise.nl/app)



The Plugwise app is available on Google Play and in the Apple App Store. Type the URL of the website in your browser address bar or scan the QR code to go to the website:

<http://www.plugwise.nl/app> \*

You will find all the information about downloading and installing the app for any operating system on your smartphone, tablet or computer here. You can also go directly to Google Play or the App Store to download the app.

#### Step 2 - Connect the Smile and configure the app

Open the Plugwise app and follow the instructions to install and configure the app. Click on “Install”.



### Settings - Existing user

#### Step 1 - Go to the main meter screen

Open the Plugwise app and go to the main meter screen (1). Then click on the “I have a Smile” button.

If you want to use the Smile at the sub-level or micro-level (for a device) and you already have a Smile P1, then go to the switch screen (2).

Then click on the “I have a Stretch” button. In the installation process, the app will recognise the Smile as a Smile at the micro level.



#### Step 2 - Install

Click on “Install”.



\* If you use your telephone to access the link, you will be directed to the relevant store automatically. If you use a computer to access the link, you will go to the Plugwise page with information about the app.

## The Smile in the Plugwise app

### Installation

#### Step 3 - Connect

If you have already connected and set up the Smile via the HTML interface, you can click directly on “Connect” after entering the ID code of the Smile to install the Smile via the app. You then do not have to enter the network settings again. If you have not installed the Smile yet, click on “Install”. Then follow the instructions to install the Smile.



#### Step 4 - Data settings

Indicate whether Plugwise can save your meter data and device names on the Plugwise server. Once you have agreed with this, you will have access to graphs and savings overviews in the app and device names will be shown in graphs and overviews accessed from outside the home as well. Help us to improve the app by sending anonymous clicks. Click on ‘Next’.



#### Step 5 - Finish installation

Wait until the four checkmarks light up green. If you have not yet set up the Smile via the HTML interface, the second green checkmark will change to a red cross. This only applies to a Smile P0 and/or S0. A button will appear to set up the Smile on the HTML page first. You can only continue with the process once this has been done.



## The Smile in the Plugwise app

### Main meter (if you set the Smile as main meter)

After starting the app, you will automatically go to the main meter screen. The current\* usage data from your meter is shown here. You can see both your energy consumption from the main meter and from the submeters\*\*. You can also see what the indicated consumption would cost you per day. Click on the arrow below “Meter Total” or on the counter itself to view your usage for the day and night rates and/or supply to the grid.



\* Depending on the meter (P0 or P1) or the number of pulses (S0).  
The current consumption is determined by the resolution of the meter.

\*\* If you set up the Smile as the main meter, you can read the gas (sub) meter when the meter present is hung under the electrical smart meter and this is supported in the telegram from the main meter. It depends on the meter itself whether these are separate meter readings (high, low, production, consumption) and whether the current power comes from the meter itself or is an approximation that must be calculated by the Smile.

You can also connect the Smile to a submeter and set it as a submeter. In that case, you directly read out the submeter and the data will not be displayed in the main meter screen but rather in the switch screen.

## The Smile in the Plugwise app

### Switch overview (if you set the Smile as submeter or micro-meter)

*Only applicable to the installation of the Smile S0 at the sub-level or micro-level or if you already have our switchable modules (e.g. Circles) in combination with the Stretch 2.0.*

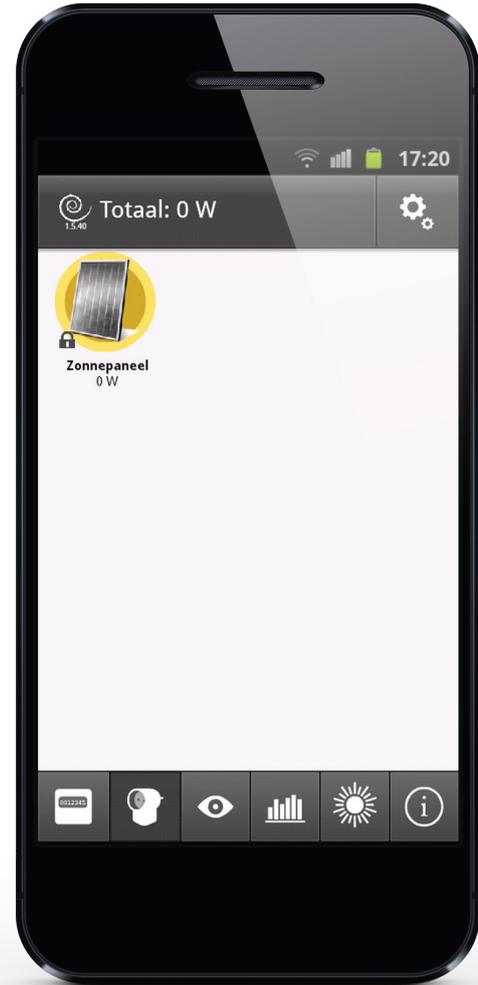
An overview of the devices that you have connected to the Smile S0 and/or Circles is displayed under “Total”.

Here, you can see which appliances are currently on or off and how much power they are currently consuming.

If you have our switchable modules in addition to Smile (e.g. Circles) you can also switch devices on or off via this screen.

You can assign a new device to the Smile by going back to the HTML interface and changing the settings here. You cannot set up the Smile in the app.

*If you have switchable modules, visit [www.plugwise.nl/handleidingen](http://www.plugwise.nl/handleidingen) for more information and options and the full Stretch 2.0 manual.*



## The Smile in the Plugwise app

### Graphs

View your electricity and gas consumption in well-organised graphs. You can choose the time period and meter and/or device for which you want to view your energy consumption.

When you view this tab for the first time, you will be asked to enter your energy profile. Your consumption costs and your consumption forecast for the coming year are calculated on basis of this profile. A completed energy profile ensures that you always have the correct information. You can always edit the information you have entered through the settings of the Plugwise app (the icon in the top right of your screen).

At the top left of the screen, you can choose to view the graphical overview in a pie chart. Expand your Plugwise package to see what your devices consume relative to your main meter. That is true insight!



## The Smile in the Plugwise app

### Overview (if you set the Smile as main meter (submeter))

In “Overview” you will find several options for extra insight into your energy consumption: “Savings”, “Forecast 2013” and “Compare profile group”. When you open “Overview” for the first time, you will be asked to fill in your energy profile.

The “Savings” option shows a comparison of your consumption compared to your consumption in the past. This gives you insight into whether you are using more energy or whether you have begun saving.

The “Annual Forecast” option gives a forecast of your energy bill at the end of this year. Here, you can choose between a forecast for electricity or gas\*.

In the “Compare profile” option, you can compare your own energy profile against the preset profile group. Here, you can choose between a forecast for electricity or gas\*.

Press the left arrow to go back to the “Overview” menu to select another overview.

Your set profile and your energy prices can be edited in the settings menu (button at top right of the screen).



\* Provided connected to a main meter with P0 or P1 where the gas (sub) meter is hung under the electrical smart meter and this is supported in the telegram from the main meter.

## The Smile in the Plugwise app

### Solar (if you set the Smile as the solar panel micrometer)

If you have installed the Plugwise App and assigned a module as a solar panel in the app, you can select the Solar feature at the bottom of the screen by clicking on the button with a sun icon.

This takes you to the option menu for the part of the app developed specifically for Solar. Firstly, you will need to enter your “Solar panel settings”. You can then get more information on the performance and yield as well as the output over the entire lifespan of your solar panels. If you also have a Smile that reads your main meter, you will also get information on how much energy you are using from your own solar production and how much you have to buy from the electricity grid.

That is a truly unique solution!

Visit [www.plugwise.com/manual](http://www.plugwise.com/manual) for the full Solar app manual



## The Smile in the Plugwise app

### Tips

Click on a tip to see a savings tip. The tips are classified into different categories at the top of the screen.

### Help menu

In the unlikely event that the Plugwise app gives an error message during start-up, you will automatically be redirected to the Help menu. You can also go to the Help menu manually by clicking on the button at the top right of your screen. This will take you to the settings menu of the app. Click on “Help” again. Here you can find the answers to the most common error scenarios. In most cases, you can easily solve the problem yourself.

In the settings menu you can also use “Settings” to change the language, the Smile and/or Stretch, your energy profile and the app settings.



## Specifications & system requirements

### System requirements

- Internet connection
- To be able to run the Plugwise app or software, you need:
  - A tablet with at least an Android or iOS operating system, or;
  - A computer with at least a Windows or Apple operating system.
  - The HTML interface has been tested on iOS, Android, Firefox, Internet Explorer, Chrome and Safari updated to the latest available versions.

### The minimum requirements for your PC to run Source are the following:

- Windows XP-SP2 or later version/Vista/7/8 (Windows RT is not supported)
- Screen resolution 1024x768
- Internet connection

### The minimum requirements for your mobile device, tablet or computer to run the app are the following:

- **Windows**
  - 2.33GHz or faster x86-compatible processor, or Intel Atom™ 1.6GHz or faster processor for netbook class devices
  - Microsoft® Windows® XP, Windows Server® 2003, Windows Server 2008, Windows Vista® Home Premium, Business, Ultimate, or Enterprise (including 64 bit editions) with Service Pack 2, Windows 7, or Windows 8 Classic
  - 512MB of RAM (1GB recommended)
- **Mac OS**
  - Intel® Core™ Duo 1.83GHz or faster processor
  - Mac OS X v10.6, v10.7, or v10.8
  - 512MB of RAM (1GB recommended)
- **Android**
  - ARMv7 processor with vector FPU, minimum 550MHz, OpenGL ES 2.0, H.264 and AAC HW decoders
  - Android™ 2.2, 2.3, 3.0, 3.1, 3.2, and 4.0
  - 256MB of RAM
- **iOS**
  - iPod touch 4, iPhone 3GS, iPhone 4, iPhone 5, iPad, iPad 2, or iPad with Retina Display
  - iOS 4.3 and higher

*All specifications and images are subject to change. See [www.plugwise.com](http://www.plugwise.com) for detailed information.*

We offer additional information in the form of:

- Frequently asked questions via [www.plugwise.nl/faq](http://www.plugwise.nl/faq).

If you have further questions, please don't hesitate to contact us using the contact form on the support page on our website, by email or telephone:

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