Installation Guide Solar Manager

Version 1.2

The screenshots are in German and some illustrations may differ from this guide as new functions have been added.

www.solarmanager.ch
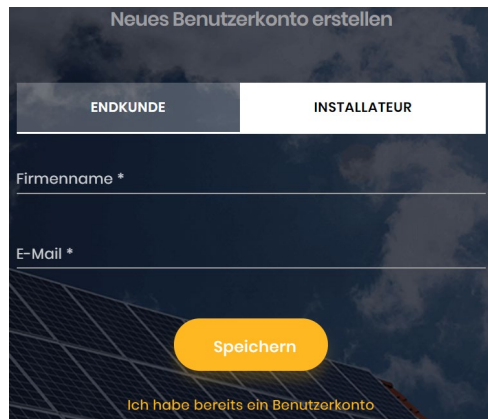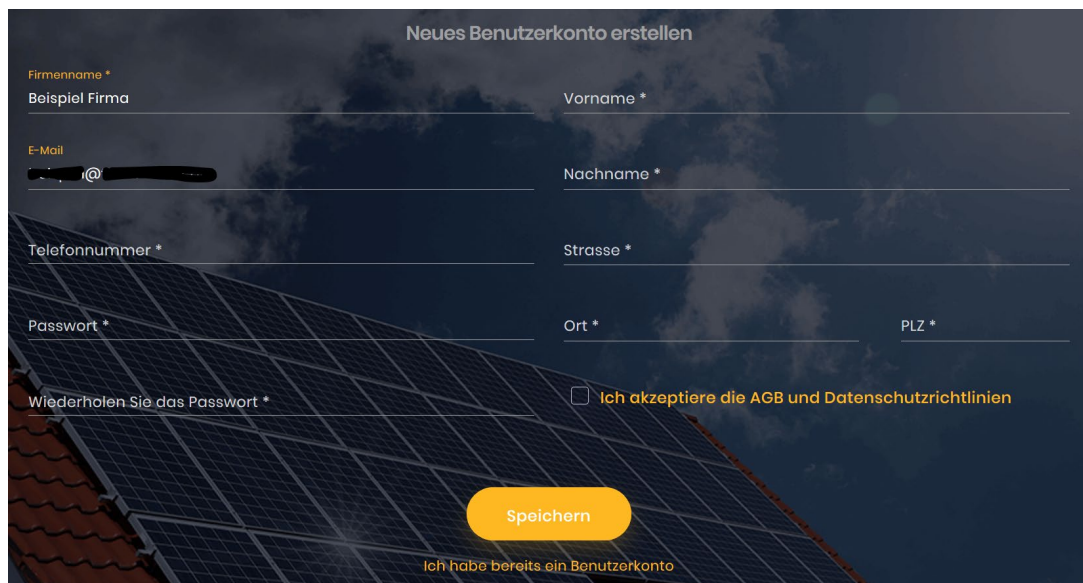support@solarmanager.ch
+41 56 512 92 08

Table of contents

1. One-time preparation

To install the Solar Manager you need a user account. You can only create this via the web interface (https://web.solar-manager.ch/signup → installer).

To do this enter your company name and email address. You will then receive an e-mail to the address provided. If you do not receive the e-mail within a few minutes, please check your spam folder.

Click on the link in the e-mail and enter the further information about your company.

Please note that the account must then be approved by an administrator. You can only use your account after this approval. The account is usually approved within one day. Please contact our support team (see page 1) if you are still unable to access your account after 2-3 days.

If you are using the mobile app, you will need to install it on your phone via the App Store (iOS) or Play Store (Android).

Hint: Cape. 6 you can find further configuration options for your account.

2. Sample installation

The following figure shows a typical installation of the Solar Manager.
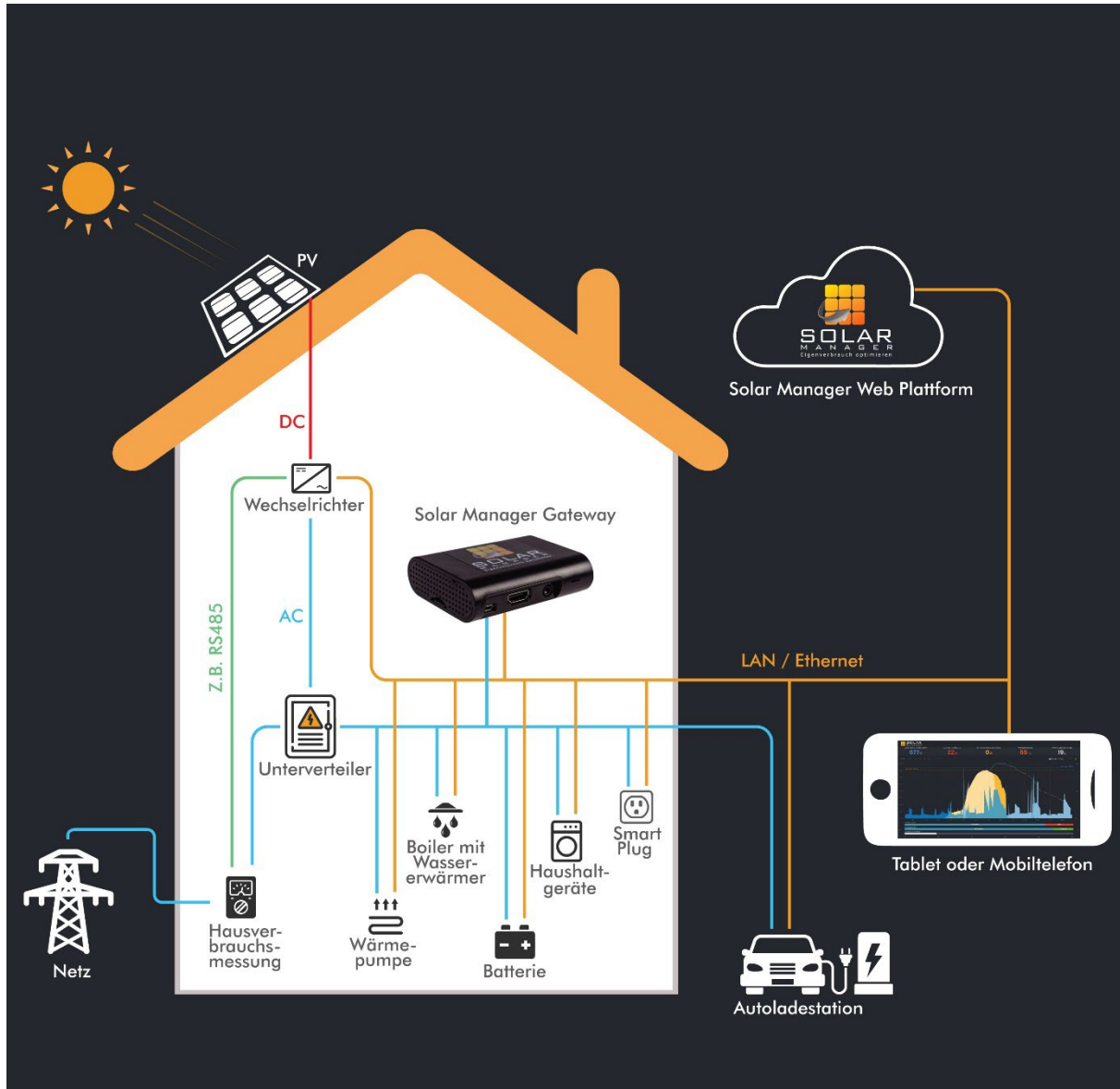
For this sample installation you will need the following components:

- Solar Manager (Gateway)
- Tablet or mobile phone for visualization
- Inverters (e.g. Fronius, SolarEdge, Kostal or SMA)
- Home consumption metering (e.g. Fronius, SolarEdge or Expert Net Control 2312-1)
- Water heaters (e.g. myPV ELWA-E or myPV ACThor)
- Car charging station (e.g. Keba P30 / P20)
- Heating (e.g. Alpha Innotec Luxtronic 2.0 heat pump)

3. Preparing for installation

You can prepare the installation before you visit the customer. In this case you only need to enter the IP addresses of the integrated devices at the customer's premises.

Preconditions:	You need to know your customer's email address and Solar Manager ID[1]
Hint:	You can also carry out these steps on site at the customer's premises
Rough procedure:	The preparation of the installation takes place in two steps:

1) *Add new end user:*
   This step prepares the new account for the end user. At the end of this step the customer will receive an email with a link to complete the creation of the account.

2) *Add devices and set general settings:*
   In this step you will enter all devices connected to the Solar Manager (including inverters and smart meters). At the end of this step you can set general settings within the Solar Manager.

   Below are these two steps both when using the mobile app (chap. 3.1) as well as when using the web interface (chap. 3.2) in detail.

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[1] The Solar Manager ID can be found on the Solar Manager Gateay below the QR code.

3.1. When using the mobile app for installers

3.1.1. Step 1: Add new end user
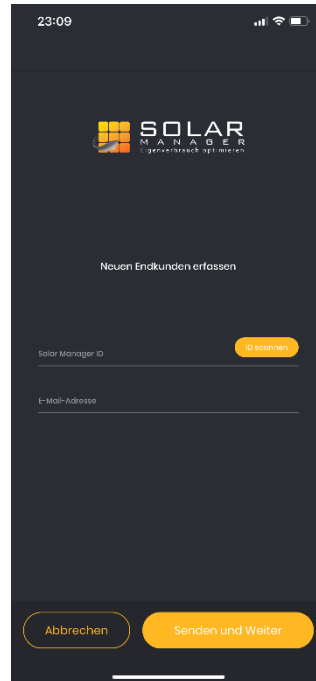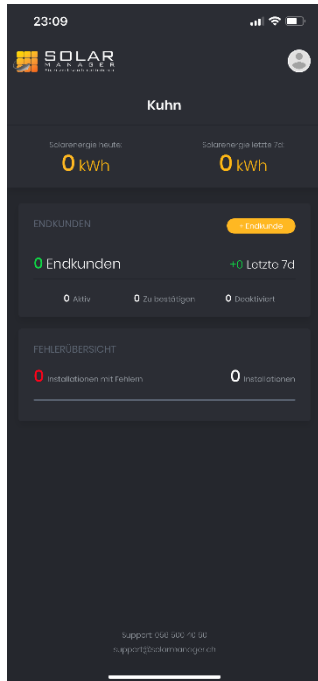
1. Open the Solar Manager mobile app and log in with your account. You will be taken to the home page. Click on the yellow button "+ End customer".

2. You will be entered into the "Creating new end user" process. Click on the "Scan ID" button or enter the Solar Manager ID manually.
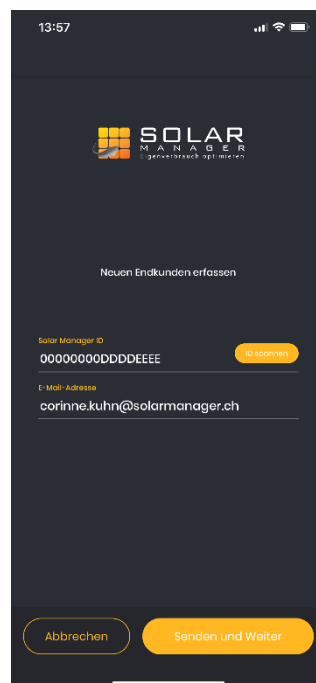

3. Once you have clicked on the "Scan ID" button, you can use your mobile phone camera to scan the QR code on the Solar Manager gateway.

4. In addition, enter your customer's email address and click on "Send and forward". The customer will receive an email to confirm their email address and complete the creation of their account.

3.1.2. Step 2: Add devices and set general settings
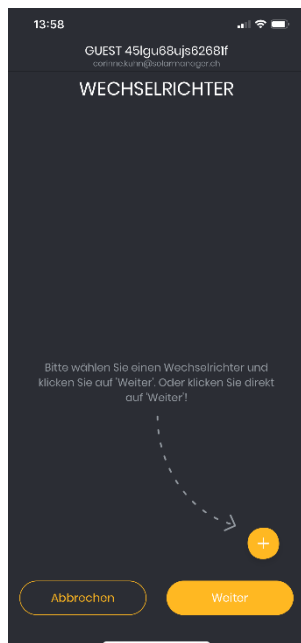
5. Add an inverter using the yellow "+" button. If you do not want to prepare the inverter(s) yet, click directly on "Next".
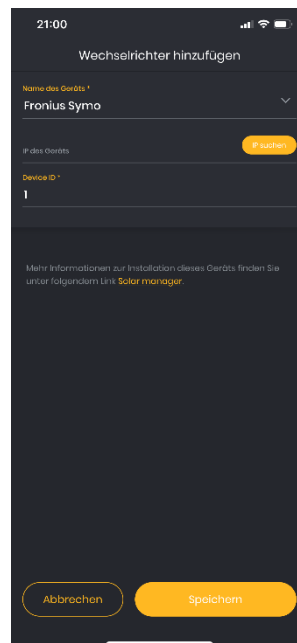
6. Select the inverter that is installed at your customer's site from the list (via "Device name"). When you prepare the installation leave the field for the IP empty. You can find information about other settings such as "Device ID" under the yellow link "Solar Manager" directly below the settings. Click on "Save".
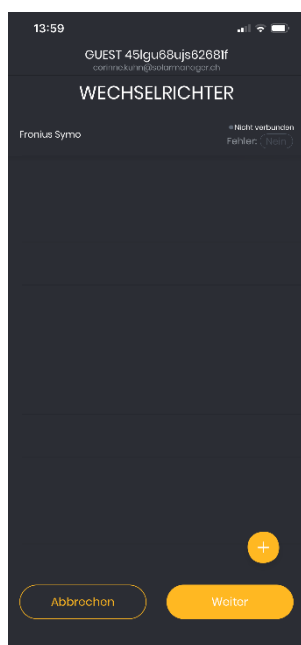

7. The inverter you just recorded will appear in the list. When you prepare for installation the status of the device remains on "not connected". If you only complete the installation at the customer's site the status will change to "connected" after a short period (or after a reload). Use the "+" button to record a second inverter or click "Next".

8. To record the smart meter, proceed in the same way as for the detection of the inverter in steps 5 to 7, then click on "Next".

9. Also use the "+" button to enter all devices (consumers) that are to be controlled by the Solar Manager.
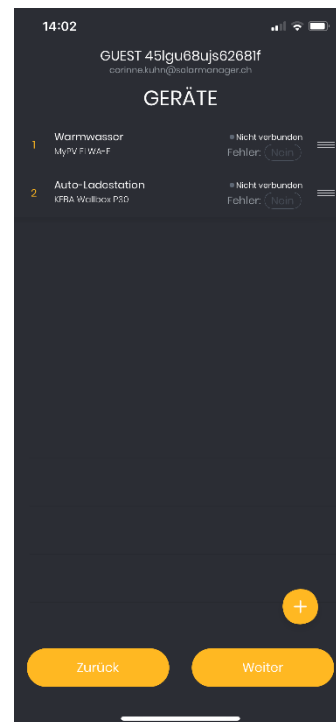
10. Once you have entered all the devices, you can change the priority of the devices by holding and sliding the three horizontal lines on the far right. A high priority means that this device is preferred when surplus solar power is scarce.

Note on general settings:
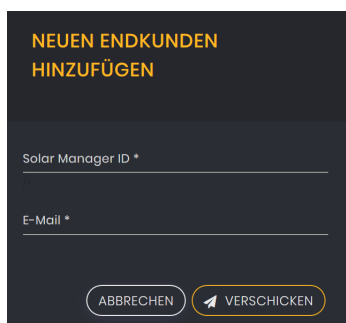
Define the control offset. This value determines the tolerance of the control. With a control offset of e.g. 50W, around 50W of the solar power is not consumed itself, but fed into the grid. This means that electricity does not have to be purchased immediately if the amount of electricity produced fluctuates slightly. It is recommended that you set this value to 0W.

In addition, record the low-tariff times at your customer's place of residence (see chapter 3.2.2, last paragraph). These settings are particularly relevant for the correct interpretation of the auto-charging settings.

11. Finally, set the general settings and click on "Done".

3.2. When using the web interface

3.2.1. Step 1: Add End User

You can add the new end user within your account in the "END USERS" tab using the "Add end user" button (see red arrow in the following figure)
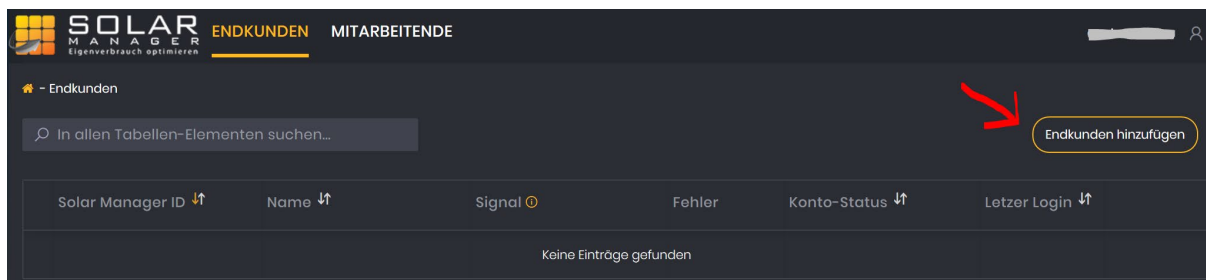

Capture your customer's Solar Manager ID[2] and your customer's email address.

After you've clicked on "Send" or "Save", the customer will receive an e-mail with which he/she can activate the account and complete the user data. *Note:* Step 2 is also possible if the account is not yet activated. However, the account must be activated within 10 days, otherwise it will be deactivated again and the Solar Manager will no longer work.
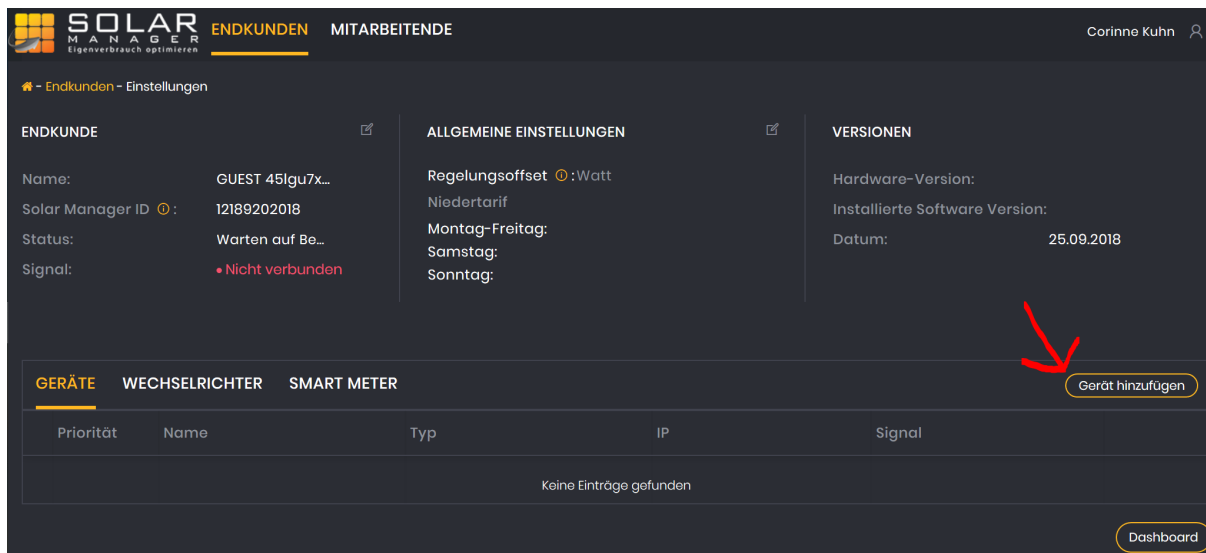
3.2.2. Step 2: Add devices and make general settings

Log in to your PC/laptop with your account under https://web.solar-manager.ch/login and select the customer you have just entered in the "END USERS" tab (he should appear at the top of the list). Click on "Settings" (see red arrow in the following image).

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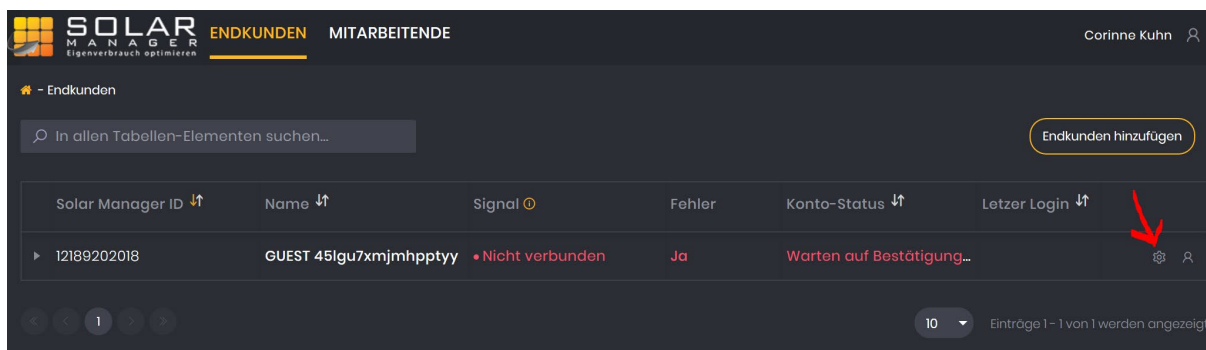
[2] The Solar Manager ID can be found on the housing of the Solar Manager gateway (below the QR code).
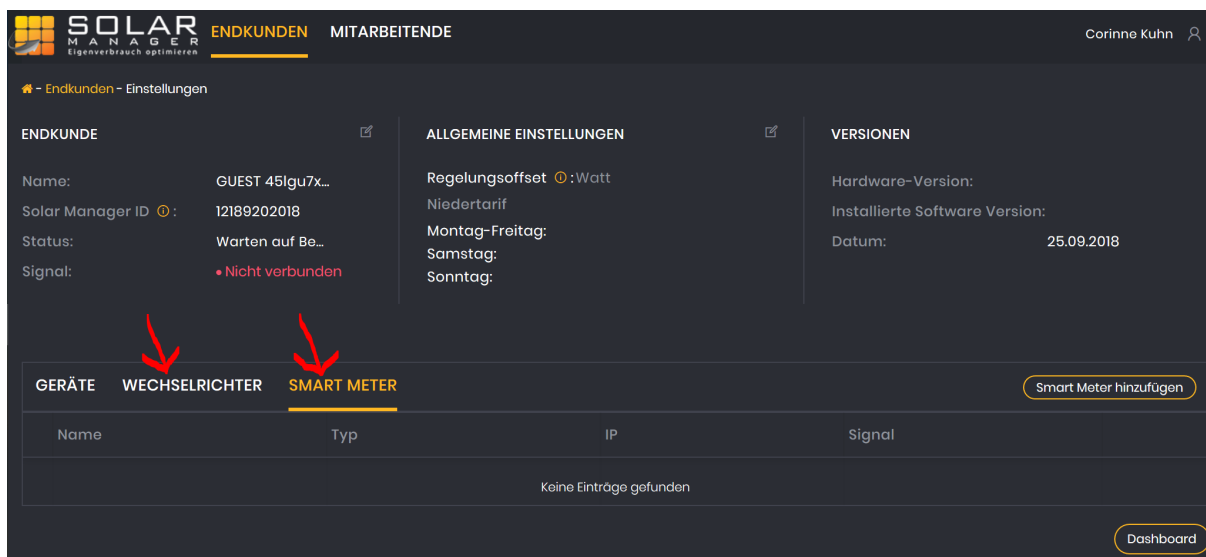
Use "Add device" (see red arrow) to enter the devices that will be connected to the Solar Manager. You don't need to capture all the information yet. In particular, the IP is not yet known at the moment and can be left empty.
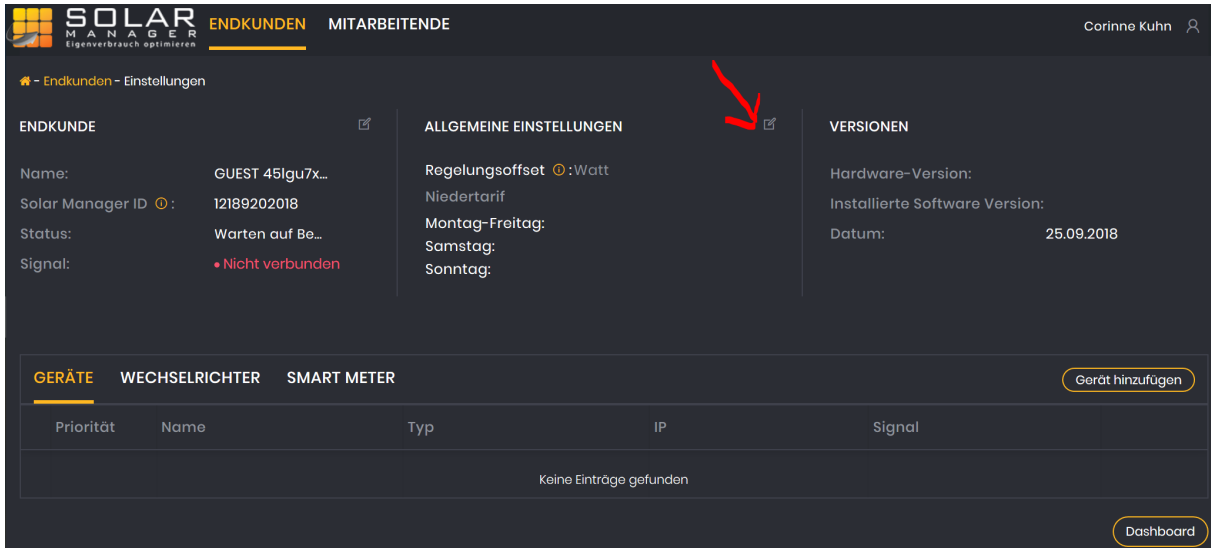

By changing the tab (red arrows in the image below), you can use "Add inverter" and "Add smart meter" to record the inverter(s) and the current meter.

By clicking on "Edit" of the general settings (red arrow), you can enter further settings (control offset and low-tariff periods).

Define the control offset. This value determines the tolerance of the control. With a control offset of e.g. 50W, around 50W of the solar power is not consumed itself, but fed into the grid. This means that electricity does not have to be purchased immediately if the amount of electricity produced fluctuates slightly. It is recommended that you set this value to 0W.

You can also record the low-tariff times at your customer's place of residence. These settings are particularly relevant for the correct interpretation of the auto-charging settings.

The entry for "from" refers to the specified day, the entry for "to" refers to the following day. In the following example, the low-tariff periods are to be interpreted as follows:

- 1st Entry
    - o Monday 19:00 (7pm) to Tuesday 6:00 (6am)
    - o Tuesday 19:00 (7pm) to Wednesday 6:00 (6am)
    - o Wednesday 19:00 (7pm) to Thursday 6:00 (6am)
    - o Thursday 19:00 (7pm) to Friday 6:00 (6am)
    - o Friday 19:00 (7pm) to Saturday 6:00 (6am)
- 2nd entry
    - o Saturday 13:00 (1pm) to Sunday 6:00 (6am)
- 3rd entry
    - o Sunday 0:00 (12am) (i.e. all Sunday) to Monday 6:00 (6am)
    - o Note: There is thus an overlap with the 2nd entry, which is interpreted correctly by the Solar Manager.

Niedertarif		
Montag-Freitag	Samstag	Sonntag
19:00-06:00	13:00-06:00	00:00-06:00

# 4. On-site installation at the customer's site

4.1. Location selection of the Solar Manager

The Solar Manager can be installed anywhere in the house. Required is a LAN and a power connection. The LAN port must have access to the Internet so that the data can be stored on the Solar Manager platform.

The Solar Manager does not necessarily have to be installed in the basement or near the inverter. However, it must be in the same network as the connected components.

4.2. Connecting the Solar Manager

Connect the Solar Manager to the power supply and LAN.
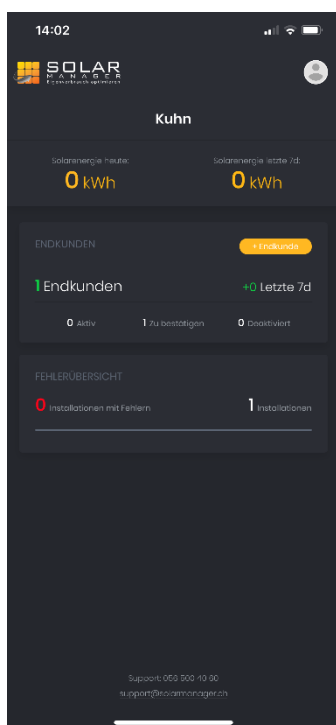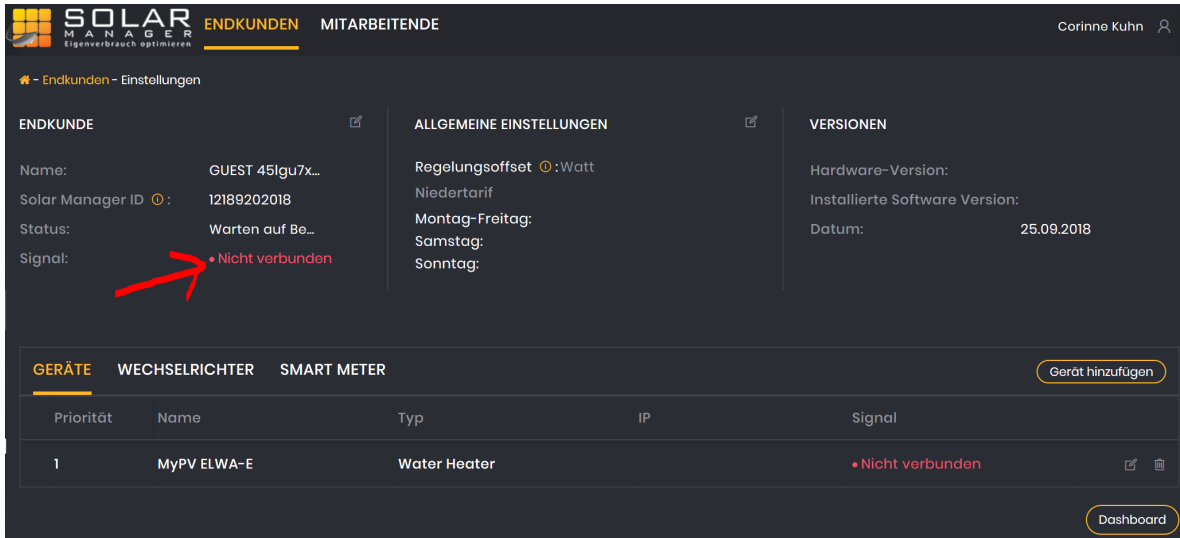
On the home page of the Solar Manager app, click in the black area "End users" and then select your customer.

You will be taken to your customer's overview page. As soon as the Solar Manager is correctly connected, the signal (see red box in the figure above) changes to "connected" (reload necessary) after a maximum of one minute.

When using the web interface the information on whether the Solar Manager is correctly connected can be found on the end customer's overview page (see red arrow in the following figure).
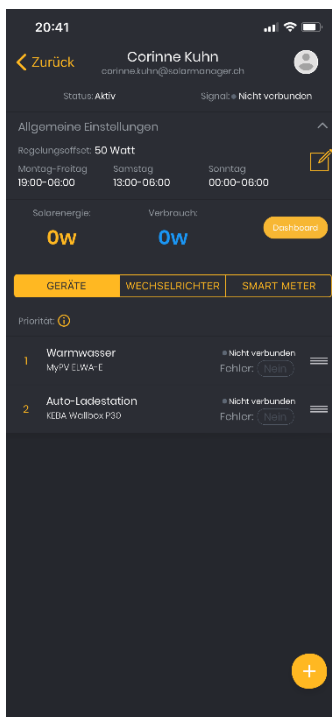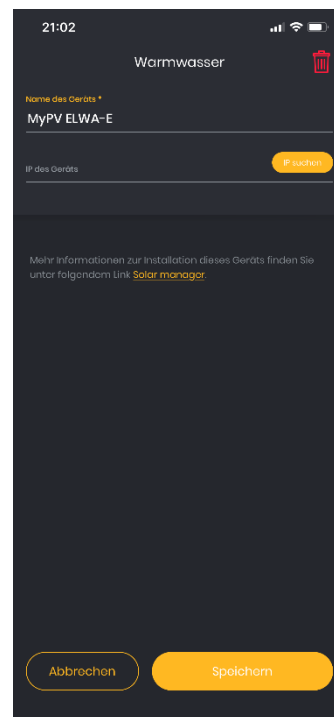

4.3. Connecting the devices

Make sure that all devices that are to be connected to the Solar Manager are connected via LAN. Specific configurations still need to be made for certain devices.

## 4.4. Configuring the Solar Manager

4.4.1. When using the mobile app for installers

Capture any missing IP addresses. To do this, proceed as follows for each device (including inverters and smart meters): Click on the corresponding device.

You can then enter the IP manually or use "Search IP" to display a list of possible IP addresses within the network and select the correct IP. Click on "Save".
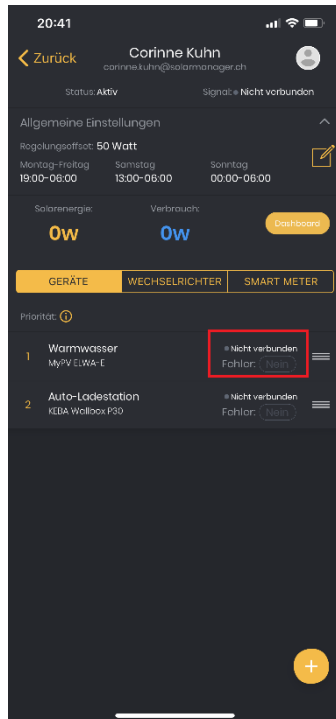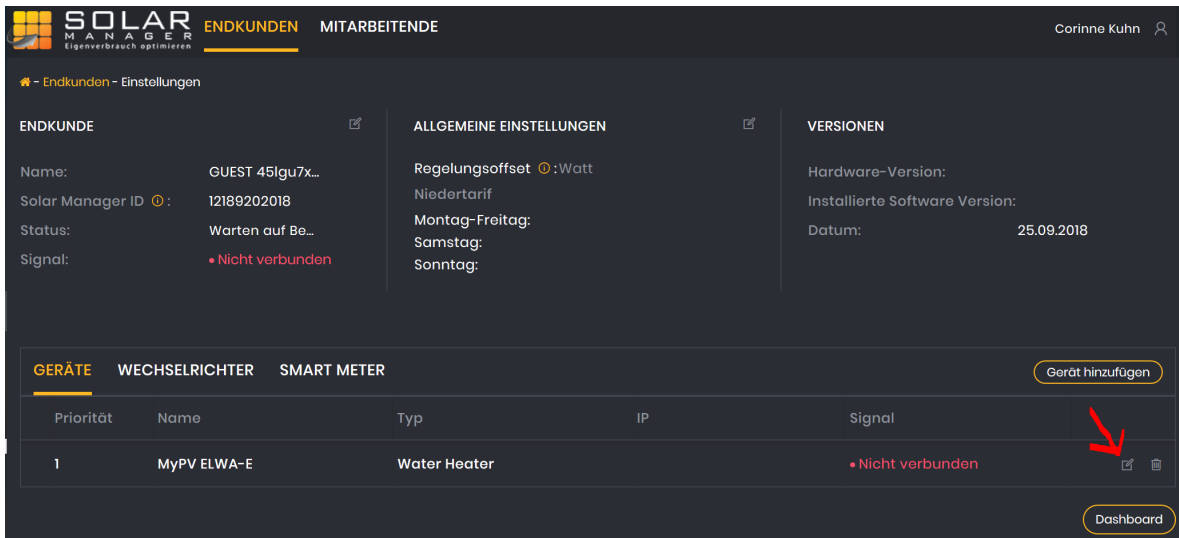
As soon as the status of the device is set to "connected" (see red box in the image above; Reload required), it is ready to use.

4.4.2. When using the web interface

Log in to your account under https://web.solar-manager.ch/login on your mobile device and select the relevant customer in the "END USERS" tab. Click on "Settings".

Use "Edit" (red arrow in the following figure) to edit all devices, the inverter and the current meter and enter the missing information (especially the IP[3]). As soon as the devices are connected correctly, the signal for the corresponding device changes to "connected" after about 10-15 seconds. To update the status of the signal, you have to reload the page using F5 or switch back and forth between two tabs (e.g. "Devices" and "Inverters").

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[3] You can find some of the IP on the display or in the settings of the integrated devices. If you cannot identify the IP in this way, you can use software that searches for all available IP addresses in the network, e.g. https://www.advanced-ip-scanner.com/.

Enter the other settings (offset and low-tariff periods), if you have done so as part of the preparation (see chapter 3.2.2) have not already been done.

By clicking on "Dashboard" at the bottom right, you can see the data measured by the Solar Manager.

5. After the installation (system monitoring)

5.1. When using the mobile app for installers

You can access your customers' configuration and measurement data at any time and see, whether the Solar Managers is working properly (in the "Error overview" section in the figure on the right).

Note: The customer has the option to remove you as an assigned installer through support. In this case, you no longer have access to the data of the corresponding Solar Manager.
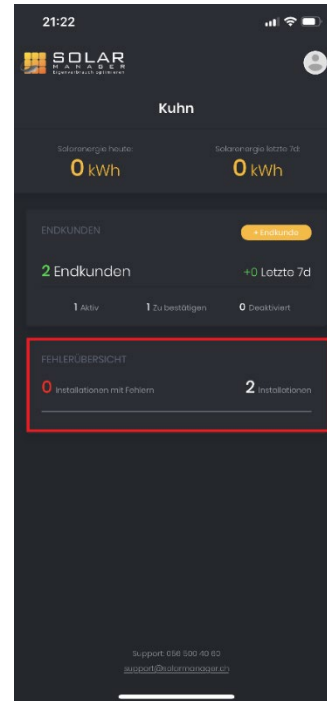

In addition, you can switch to the customer app in the customer's view by clicking on the "End User App" button (see red marker in the figure on the right). There you can adjust the settings for the car charging station or smart plug, for example (see image below). These settings can only be adjusted via the customer app.

Hints:
- For this function, the customer app must be installed on your smartphone.
- You can get back to the app for installers by exiting the customer app and calling up the installer app again.
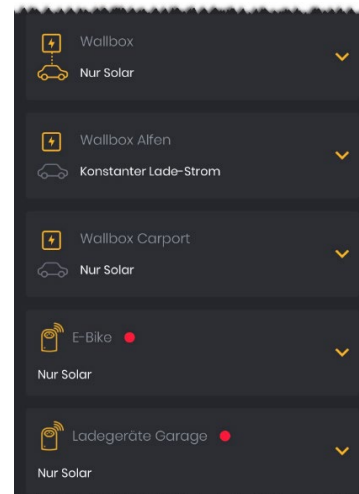
5.2. When using the web interface

You can access your customers' configuration and measurement data at any time and see, whether the Solar Manager are working properly (by sorting the "Signal" and "Error" columns).
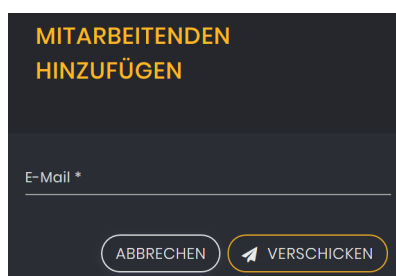
6. Managing your account and employees

You have the option of authorizing other people within your company to also access your company's Solar Managers and install new Solar Manager gateways. To do this, enter all employees who install the Solar Manager for your customer's in the "EMPLOYEES" tab of the web interface. To do this, follow these steps:

Click on "Add employee" and enter the employee's email address. The employee will then receive an email with a link to confirm their email address, set their password and enter further information.
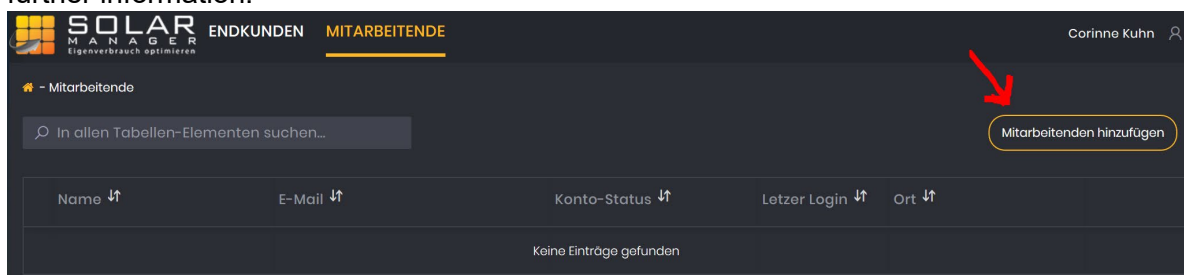

As soon as an employee leaves your company, you must delete his/her account. To do this, click on the "Delete" icon (red arrow in the image below). If you do not delete the accounts of your former employees, you are liable for any damage caused by possible misuse of these accounts (see also General Terms and Conditions Solar Manager).
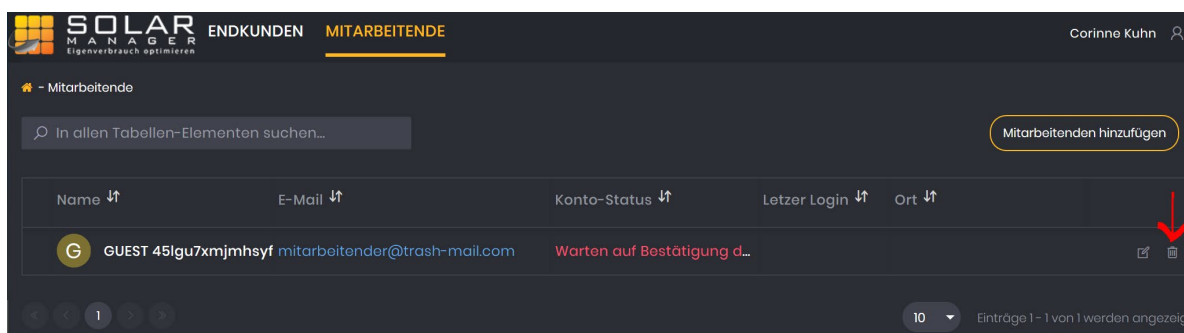
Your employees can mutate their user data themselves. If you still want to make changes you can do so by clicking on "Edit" (red arrow in the figure below).

Note: Never change the account status from "Waiting for confirmation by user" to "active". In this case, the user will not be able to complete his registration and generate a password. If it does happen, your employee can create a password using the "Forgot password" function.
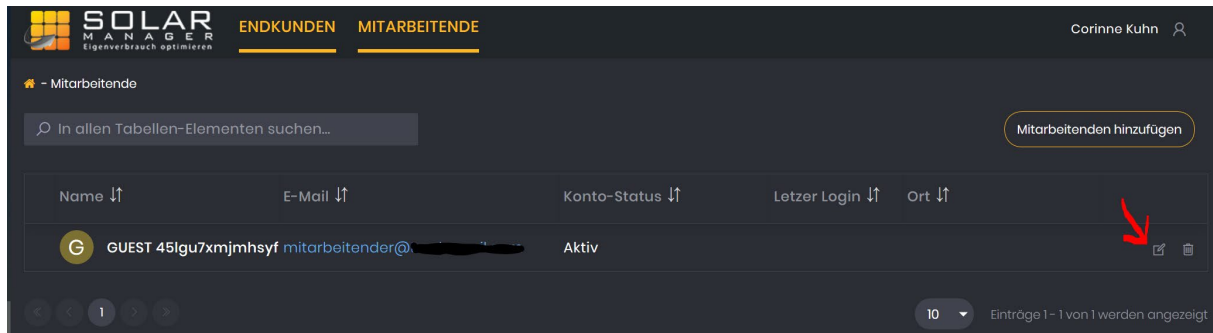
You can also edit your own profile. To do this, click on your picture, or the figure in the top right corner and then on "Edit profile".

You can customize the following information (see image below): company name, first name, last name, email, password, language, address (street, zip code, city), phone number, homepage. In addition, by clicking on "New photo" you can add an image (e.g. your logo or a picture of you). This image will only appear within your account. Below the photo you can upload your logo and specify whether it should be displayed to you and your customers in the web interface ("Web Interface" option) and/or whether it should be displayed to you and your employees in the mobile app ("App for installers" option) and/or whether it should be displayed to your customers in the customer app ("App for end customers" option).

A

Neues Photo

LOGO ANZEIGEN ⓘ :
- ☐ Web Interface
- ☑ App für die Installateure
- ☐ App für die Endkunden

Firma *
_____

Vorname *
Andreas

Nachname *
Kuhn

Strasse *
Street1

Ort *
city

PLZ *
8777

E-Mail
_____

E-Mail ändern

Passwort
••••••••
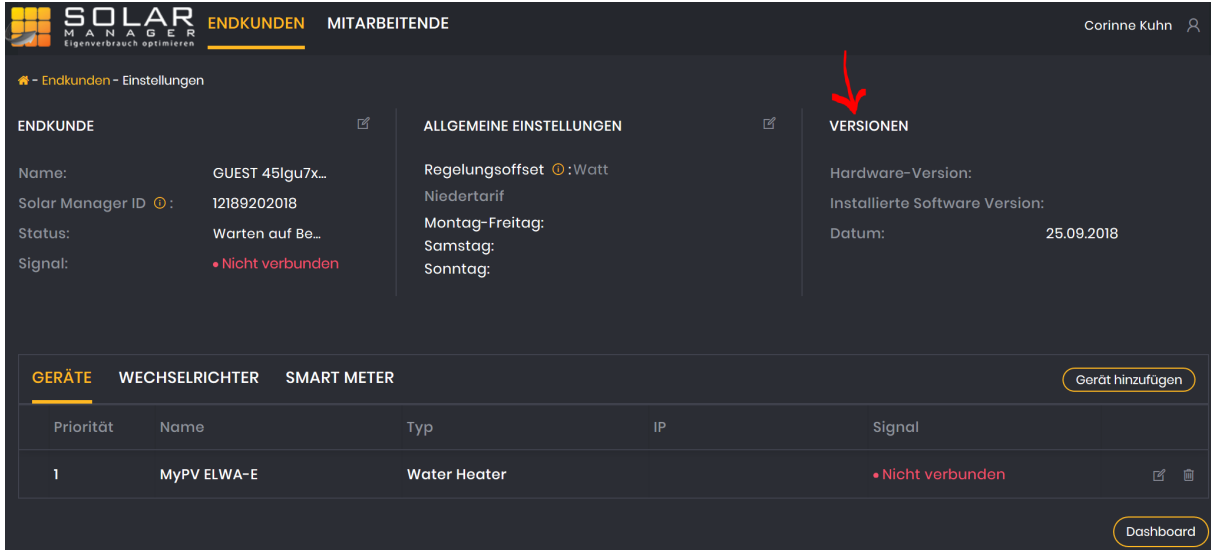
Passwort ändern

Sprache *
Deutsch

Telefonnummer *
11

Homepage
www.solarmanager.ch

7. Updating the software

The software on the Solar Manager Gateway is updated automatically. However, you can view the current status at any time in the web interface under «END USERS», → selecting the corresponding customer → , «Settings», → «Versions».