



Installation Instructions

EnergyManager

Important Installation Instructions

*Read the installation guide first,
before you start installing
the devices*



INTEGRATION OF A WALLBOX

- KEBA KeContact P30 c-series and x-series
- WEBASTO LIVE

About this manual

This manual describes the connection and integration of an installed charging station (wallbox) with the SOLARWATT EnergyManager. It also explains how to integrate the wallbox into the energy management system in order to operate it with a maximum of self-generated, PV surplus power.

Applicable documents

- Installation instruction EnergyManager
- User manual EnergyManager
- Installation instruction Keba/ Webasto Wallbox

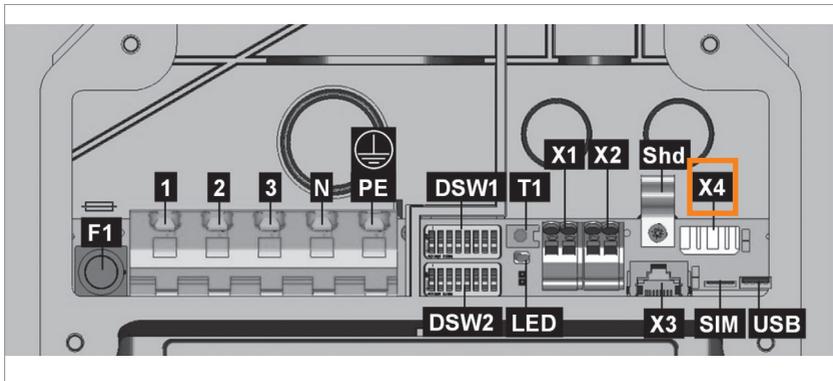
1. Installation of the wallbox

KEBA:

- Compatible wallboxes: KEBA KeContact P30 c-series and x-series
- Number of wallboxes: one wallbox per EnergyManager
- RFID is not compatible with EnergyManager pv-optimization. RFID function is deactivated by default and must not be activated.

Installation

- Install the wallbox according to the KEBA installation manual
- Generate network connection via Ethernet1-connection X4 of KEBA (LSA+fixed cabling)



- Activate UDP-Interface 'Smart Home' via Dip Switch

DSW1.3	Activate UDP-Interface (Smart Home)	
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A connection is only possible with Keba P30 c-series and x-series. To be able to connect to the EnergyManager, the wallbox must have a firmware version 'Releasepack 1.6.3' or higher. You can find the current firmware version via the configuration screen of the Keba wallbox (only x-series) in the menu item 'software update'.

Webasto Live:

- Compatible wallboxes: Webasto Live
- Number of wallboxes: one wallbox per EnergyManager
- RFID is not compatible with EnergyManager PV-optimization.
- RFID function is deactivated by default and must not be activated.
- Connection is only compatible with EnergyManager pro

Installation

- Install the Webasto Live wallbox according to the Webasto installation manual
- Generate network connection (LAN/WLAN) of the Webasto Live according to Webasto installation instruction
- Configuration of the Webasto Live wallbox (activation of the energy management interface) according to Webasto configuration instructions

Configuration Webasto Live wallbox

- Configuration of the Webasto Live wallbox according to Webasto configuration instructions

For generating a communication link between EnergyManager and the Webasto Live Wallbox, the following settings have to be made in the Webasto configuration portal:

Webasto configuration portal – Backend:

Backend (1):

 🇬🇧 Logout Dashboard

Network | **Backend** | HEMS | Authorization | Power | System

Connection

Connection Type	① Ethernet
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OCPP

OCPP ChargeBoxIdentity (ChargePointID)	① Webasto_Webasto_AC_Live_190014758901
OCPP Mode	① OCPP-1.1.6
WebSockets JSON OCPP URL of the Backend	① ws://192.168.201.236:7070
WebSockets keep-alive interval	① 0

Type in:
ws://xxx.xxx.xxx.xxx:7070
xxx = IP-Adress of EnergyManager

Backend (2):

General

Restart transaction after power loss	① On
Backend connection timeout	① 60
SSL Strictness as client	① Encrypt only - No authentication
TCP Watchdog Timeout	① 0
Display backend disconnect as error	① Off

Webasto configuration portal - Hems:

 Feel the Drive 🇬🇧 [Logout](#) [Dashboard](#)

Network	Backend	HEMS	Authorization	Power	System
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Modbus

Modbus TCP Server

Webasto configuration portal - Authorization:

 Feel the Drive 🇬🇧 [Logout](#) [Dashboard](#)

Network	Backend	HEMS	Authorization	Power	System
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Free Charging

Free Charging

If in doubt allow charging

 Feel the Drive 🇬🇧 [Logout](#) [Dashboard](#)

Network	Backend	HEMS	Authorization	Power	System
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Dynamic Load Management

Dynamic Load Management - DLM Master/Slave

DLM Network Id

Disable Discovery Broadcasting

DLM Algorithm Sample Rate

Allow EV Wakeup

EVSE Sub-Distribution Limit (L1/L2/L3) [A]

Operator EVSE Sub-Distribution Limit (L1/L2/L3) [A]

2. Connection of the wallbox to the EnergyManager

- Go to the EnergyManager configuration screen

Operating system OS X (Apple) or Linux: **<http://energymanager.local/>**

Operating system Windows: **<http://energymanager/>**

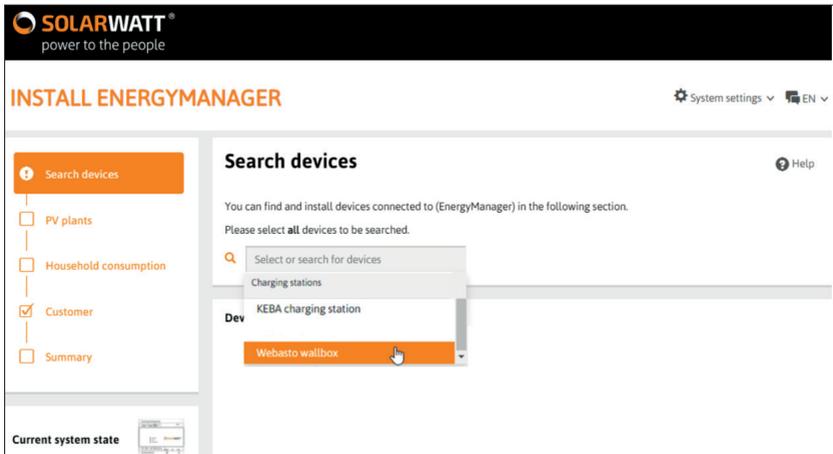


To connect the wallbox to the EnergyManager, you have to be present on site and in the local network of your customer. If access by entering the URL is not possible, please try the following alternatives:

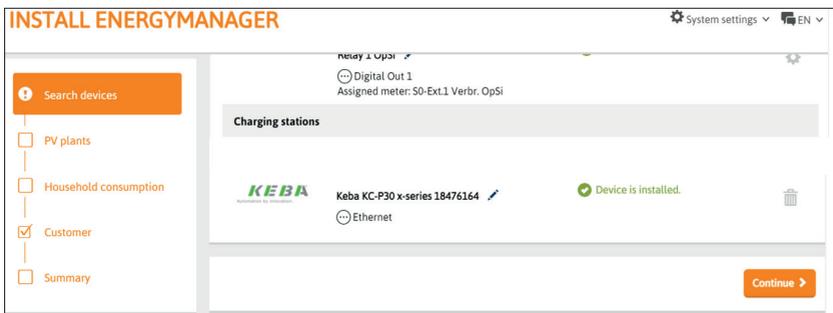
- Open a 'private window' in the browser (incognito mode)
- Use another browser
- Enter the IP-address of the EnergyManager (this can be found with the help of network scan programs such as 'Network Scanner' (Windows) or 'Fing' (Android))

ATTENTION! A network scan requires prior consent of your customer!

- **Smart Setup > open 'search devices': open**
- select **charging station** in the dropdown menu and chose **Keba-charging station** or **Webasto wallbox**, to add it to the search list



- click **find and install devices**
- you can see the wallbox (green) in the field **found devices**



3. Display in the EnergyManager portal

To register your customer for the EnergyManager portal, please read the installation manual of the EnergyManager.

Go through the first steps in the portal together with your customer. Show him how to access the portal and where he can display the wallbox data.

- Login to the EnergyManager portal
- Start the Mobility app



Mobility
SOLARWATT ...

- The Mobility application bundles all wallbox data. In the menu tab status, it displays the **charging status**, the **connection status** and the **added charged range**.

The screenshot displays the SOLARWATT Mobility app interface. At the top, there is a black header with the SOLARWATT logo and the tagline 'power to the people'. Below the header, the word 'MOBILITY' is written in orange. A navigation bar on the left contains three icons: a grid for 'Overview', a car for 'Status', and a gear for 'Settings'. The main content area shows a table for a vehicle named 'Keba KC-P30 c-series 19152546'. The table has five columns: Electric Vehicle, Status, Connectivity status, Charged range, and Average consumption. The data row shows 'Nissan Leaf', 'STANDBY', 'UNPLUGGED', '81 km', and '15 kWh/100km'. Above the table, there is a diagram showing a car connected to a charging station with a blue 'X' over the connection line, indicating a disconnection or error.

Electric Vehicle	Status	Connectivity status	Charged range	Average consumption
Nissan Leaf	STANDBY	UNPLUGGED	81 km	15 kWh/100km

4. Optimization in the EnergyManager portal

In the **control app** of the EnergyManager portal you can optimize the usage for the wallbox.

The different options to do that are described below.

Detailed information on the optimization procedure can be found in the **EnergyManager user manual** in the chapter „control“.

The manual is available in the download area on our website www.solarwatt.com in the category EnergyManager.

Manual control

Manual control means, that a consumer device is switched directly via the EnergyManager portal using the **(ON)/(OFF) button**.

In the case of the wallbox, the ON/OFF button is labeled with **“charge”**. Using the charge button, the **loading** with maximum power is started immediately.

A popup menu prompts you to make settings regarding the duration of the instant charge.

PV-optimized

Optimization means that a particular device is automatically switched on, when there is a surplus of solar power on a level that you previously defined.

In the case of the wallbox it means, that the vehicle is charged with the pv-surplus. The minimum and maximum charging power depends on the settings of the wallbox, the charging cable used and the vehicle.

The pv-optimization is normally activated for a device, but can also be overridden temporarily by manual control or settings on the timer clock.

Time control

With the time control, you can define fixed time slots, when a device is always switched on- or off, regardless of current surplus of solar energy.

Combination of pv-optimization, time control and manual switching

You can design the optimization strategy for your devices as a combination of pv-optimization, time control and manual switching. The pv-optimization is then always activated for this device. Furthermore you have the opportunity to define fixed on- and off- times or for manual switching of the device.

ENERGYMANAGER

**FULL TRANSPARENCY.
INTELLIGENT USE OF ENERGY.
MAXIMUM INTERNAL CONSUMPTION.**

Do you have questions?

Your account manager or our Customer Service will be happy to help you.

www.solarwatt.com