

Installation instructions

Enegic Monitor for power control of Charge Amps charging boxes



This manual describes the installation and configuration of the Enegic Monitor as well as the configuration of power control together with Charge Amps charging boxes.

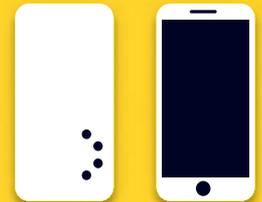
The manual is divided into five sections:

1. Create an account for the user, done either by an installer (1a) or a private user (1b).
2. Installation of Enegic Monitor with power sensors.
3. Configuration of Enegic Monitor for a Wi-Fi network.
4. Create new Amp Guard reporter to send power values to Charge Amp's cloud service.
5. Other: What to do for properties with solar production and/or complex electrical systems as well as troubleshooting information.

First of all!



- You need to install the Enegic app on your smartphone/tablet to set up Enegic devices for an account (section 3) and to register Enegic licenses with a QR code (section 4). If you don't have the Enegic app installed, you can find it on the App Store and Google Play.
- The yellow sections of this instruction contain directions for things that you need to keep an eye on.
- Before installation begins. Start by carefully reviewing the yellow sections and making sure everything is in order before proceeding.



Notions and explanations

Enegic Monitor	The measuring unit itself is to be installed according to these instructions.
Enegic App	Downloadable app for Enegic on Google Play and App Store. The Enegic app is also available for display in regular web browsers on app.enegic.com .
	Note: Enegic device configuration/reconfiguration and license registration can only be done from the downloaded Enegic app (Android or iOS).
Enegic Admin	The administration tool for installers who manage user accounts for customers. Enegic Admin can be found via the link admin.enegic.com .
Enegic Licence	A license certificate with a QR code for easy registration of the license e.g., power control of electric vehicle charging.
Enegic Reporter	A function to send power information to the Charge Amps Cloud service for power control when charging electric vehicles.
Solar installation	For properties with solar power, the solar production can be measured separately using an additional Enegic Monitor unit. Read more about this in section 5.

Do you have questions or need help? Get in touch!



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1a

Create a user account as an installer

Do you have an installer account?

- If you are an installer and install on behalf of the customer, you will need an administrator login to Enegic Admin. If your business doesn't already have a registered admin account, contact support.
- You can find our email addresses and phone numbers at the bottom of the page.

Before you start:

- Make sure you have a functioning login to an Enegic Admin account for your business, see above.
- If an Enegic account has already been created for the customer and you as an installer have received information regarding the account name, proceed to "Install" in section 2.
- Enegic Admin is preferably used on a larger screen, either in a web browser on a computer or tablet.

Create the customer's Enegic account in Enegic Admin

Use a computer or smartphone to sign in to Enegic Admin. The web address is admin.enegic.com and you sign in with your administrator account. Choose one of the following alternatives:

1. Create an account for an organization (for example a company):
 - Select "Organization Accounts" from the main menu.
 - Click "Add" to create a new organization.
 - Fill in details to create the account.
2. Create an account for a private customer:
 - Select "Private user accounts" from the main menu.
 - Click "Add" to create a new customer account.
 - Fill in details to create the account.

Note: For the customers to access their accounts, you must activate the account by pressing the orange ball with an exclamation point in it. Then click on the "Enable User Account" button for an activation email to be sent to the user.

1b

Create an account as a private user

Create a user account from the login page in the Enegic app

If you don't already have a registered Enegic account (created by an installer or a reseller), you can create an account from the sign-in page.

Tap the text "No account? – Sign up here!" on the app's login page, and then follow the steps to create a personal Enegic account.

Once you have created your account and clicked on the link in the confirmation email sent to your email address, everything is ready for you to be able to log in to your account.

Note: If you have not received a confirmation email within 2 minutes, make sure that the email has not ended up in the spam folder. If you still can't find a confirmation email, try to register again.

2

Install Enegic monitor with current sensors

Checking before you start

- 1. Enegic Monitor communicates via WiFi. So you need access to a WiFi network and you also need the password to the network. Make sure you have this information available before proceeding.
- 2. Enegic Monitor is powered by a USB cable from a USB adapter. Make sure you have a 230V socket nearby where the device should be placed.

Mounting sensors for current measurement

- Snap the current sensors around the phase conductors which will be measured. Please note that this should be done by a qualified electrician.
- The measurement sensors are marked with "L1", "L2" and "L3" at both ends. Make sure that the sensor with the correct marking is mounted on the respective phase conductors.
- Remove the backside of the measuring unit and connect the power sensor cables to the green terminal block, L1 to the socket marked 1, the conductor with the red plastic cap to '+', the conductor with the black plastic cap to '. Next, do the same for the sensors for L2 and L3.

2

Install Enegic monitor - Continuation

Connection of power supply and mounting

1. Connect the supplied USB power cord to the green terminal of the measuring unit marked "Ext. Pow". Red conductor connects to '+' and black conductor to '-'.
2. Then attach all cables to the circuit board with the supplied cable tie and pull the cables out through the grooves in the lower short side of the measuring unit.
3. Double-check that all connection pins to the sensors are securely inserted into the terminal. Then reattach the backside of the measuring unit.
4. Plug in the USB power cord into the included power adapter and connect to the nearest 230V socket. The device can also be supplied with a standard USB/micro-USB cable. In this case, the external micro-USB connector is used as the connection.
5. Attach the measuring unit to a protected location with the self-adhesive Velcro. Please note that the measuring unit is not IP rated for outdoor use and should be installed in a place protected from rain and water.

After the device is powered on

- Once the Enegic device receives power, the button in the bottom right will flash with blue light, indicating that the device is in configuration mode.
- If you ever need to return to configuration mode, press and hold the bottom button for more than 10 seconds, whereupon the device starts flashing blue to indicate that it has entered configuration mode.

3

Configure

Sign in to the Enegic app

Launch the Enegic app. You'll recognize the Enegic app on the outright icon.



Login via the admin account

- Launch the Enegic app on your smartphone/tablet.
- To sign in to the user's account, use the Impersonate feature that is enabled on your admin account. When you enter your username and password in the Enegic app, an additional input field appears under the password bar - "Sign in as a user", as seen on the image to the right.
- In the "Sign in as a user", enter the name of the user account of the current customer.



Login for private users

- Launch the Enegic app on your smartphone/tablet.
- Sign in with your username and password.

Set up a new Enegic Monitor device

Go to Settings in the app's main menu and select the "NEW DEVICE" tab and follow the instructions. During setup, you will provide what type of sensor to connect to the device. Choose what applies to the device you are installing.

Check the correct function

When the device is configured, it will appear under Overview. Keep in mind that it may take a few minutes after configuration for the device to send measurement data. Before the first values have arrived in the app, the device will appear greyed out.

If your device doesn't appear in the app under Overview – check out troubleshooting in section 5.

To make sure that current values are recorded on all phases, press the '+' sign in the upper left corner of the device. The expanded frame displays detailed information about the power output on each phase in real-time.

In the upper right corner of the device's frame is a right arrow. When you press this arrow, it sends you to pages with detailed information about the device and its collected data. Here you will also find a tab for Settings which includes, among other things, a feature to reconfigure the device for another Wi-Fi network.



4

Set up a power control reporter

Register license key

1. Use the installed Enegic app to sign in to the account.
2. Go to Settings -> License and follow the instructions to scan the QR code in the attached license document. (For some installations, the license may be registered to the account in advance)

Create a new AmpGuard reporter

The Enegic System communicates with other systems e.g. exchange of power and energy information. An Enegic reporter connects data and information from Enegic to another system. In this way, Enegic can deliver power values to a load balancer in Charge Amp's cloud service for dynamic power control of one or more charging boxes.

1. Go to Settings from the main menu, and then click on the "Reporters" tab.
2. Press the "Add new reporter" button to create a new, temporarily empty reporter.
3. When the new reporter appears in the list, tap the edit icon to the far right.
4. Select Amp Guard as the type of reporter.
5. Enter an appropriate name, such as "Halo power control".
6. Press the "Get ID and password" button to generate an AmpGuard ID and password that is then linked to the reporter.
7. Be sure to write down the AmpGuard id and AmpGuard passwords, they should both be entered into the ChargeAmps admin as the serial number and PIN of the Measurement Device that you then create.
8. Make sure that the correct measuring unit is specified as the total consumption measurement unit.
9. To save selected settings, press the "Save" button in the top right corner.



What to do in Charge Amps Partner login

1. Create a new "Measurement Device" under the current user with serial number and PIN from the reporter above.
2. Create a new Load Balancer and connect with the current user. Add Measurement Device and Charging Box.
3. Once all the settings are made, the measurement device will be displayed with a status of ACTIVE, indicating that the Charge Amps system has started receiving data from the Enegic reporter.

Remember:

1. In order to perform the necessary configurations of the charging box and load balancing in the Charge Amp system, a log in to Charge Amps Partner is needed. Contact Charge Amps support if you don't already have a charge amps partner login.
2. Link to Charge Amps Partner: my.charge.space/partner.
3. Be sure to check the important parameters under Load Balancer, among others, so that all the values for fuse levels, etc. are set correctly. See Charge Amp's documentation for detailed instructions.

5

Solar production and other

Property with solar production

If the property has a solar power producing unit, then its own solar production can be measured with the help of Enegic. In order to distinguish consumption from solar production, power sensors are installed that measure the solar production separately from the property's consumption.

Please contact us for more information about measuring solar installations.

Measurement of complex systems

Enegic can handle the measurement of more complex installations where, for example, there may be several bottlenecks in the form of multiple substations with different power limitations. With multiple measuring units, these situations can also be handled.

Do not hesitate to contact us if you have questions about more complex measurements

Troubleshooting

If the device does not appear under Configuration Overview:

Press and hold the bottom button of the device for a little over 1 second to activate the LED indicator (the indicator is active for about 30 seconds before it automatically turns off).

- | | | |
|-----------------|---------|---|
| BLUE BLINKING | ■ ■ ■ ■ | The device is in configuration mode. |
| YELLOW BLINKING | ■ ■ ■ ■ | The device tries to connect to a WiFi network specified during configuration. Usually, it's the wrong password that has been entered if the device gets stuck with yellow blinking. |
| GREEN BLINKING | ■ ■ ■ ■ | The device is connected to WiFi but cannot communicate on the internet. Does the access point/router have contact with the internet? |
| GREEN GLOW | ■ ■ ■ ■ | The device has been registered in the system and is visible in the Enegic app under "Overview". |