

zappi

eco-smart EV charge point



User Manual

MODELS:

ZAPPI-2H07UW-G

ZAPPI-2H07UB-G

ZAPPI-2H07TW-G

ZAPPI-2H07TB-G

ZAPPI-2H22UW-G

ZAPPI-2H22TW-G

ZAPPI-2H22UB-G

ZAPPI-2H22TB-G

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NOTICE

The UK Government's Electric Vehicle (Smart Charge Points) Regulations 2021 have been introduced. Please ensure you read this manual fully before installing. Processes and features have changed.

Electric Vehicles (Smart Charge Points) Regulations 2021

From 30th June 2022, any EV charger installed in a private setting i.e. home or workplace, NOT public, in England, Scotland and Wales has to meet the Electric Vehicles (Smart Charge Points) Regulations 2021.

From 30th December 2022, further regulations come into force.

To ensure all our zappis are compliant by the date the regulations come into force we will be taking a phased approach with the implementation of certain features.

For information on how these new regulations may affect you and your myenergi zappi please read the appended information at the back of this manual.

Appendix A - (Electric Vehicle Smart Charge Points) Regulations 2021 – Regulations as of 30th June 2022

This Appendix is relevant to all zappis INSTALLED on or after the 30th June 2022

Appendix B - (Electric Vehicle Smart Charge Points) Regulations 2021 – Regulations as of 30th December 2022.

This appendix is relevant to zappis INSTALLED on or after 30th December 2022.

1. Introduction

Thank you for choosing zappi. Of course, we think you have made an excellent choice and are sure you will be incredibly happy with the features, benefits, and quality of your myenergi product.

These instructions will help you to familiarise yourself with the zappi. By reading the instructions, you will be sure to get the maximum benefit from your 'eco-smart' device.

2. Safety

zappi is an AC EV charger, intended to be installed in a fixed location and permanently connected to the AC supply network. It is a Class 1 item of electrical equipment in accordance with IEC 61140.

The unit is designed for indoor or outdoor use at a location with restricted access and should be mounted vertically either surface (wall) mounted or on the dedicated pole mount supplied separately by myenergi.

The device has been manufactured in accordance with the state of the art and the recognised safety standards, however, incorrect operation or misuse may result in:

- Injury or death to the operator or third parties
- Damage to the device and other property of the operator
- Inefficient operation of the device

All persons involved in commissioning, maintaining, and servicing the device must:

- Be suitably qualified
- Have knowledge of and experience in dealing with electrical installations
- Read and follow these operating instructions carefully
- Always disconnect the device from the supply before removing the cover

The device is not to be used by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the device by a person responsible for their safety.

zappi comes in either tethered or untethered variants. The untethered version should only be used with a dedicated cable fitted with a Type 2 plug which is compliant with EN 62196-1 and EN 62196-2. Adaptors or conversion adaptors and cord extension sets are not allowed to be used.

Failure to install and operate the zappi in accordance with these instructions may damage the unit and invalidate the manufacturer's warranty.

3. Disposal

In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in national law, used electrical devices **must** be collected separately and recycled in an environmentally responsible manner. Ensure that you return your used device to your dealer or obtain information regarding a local, authorised collection and disposal system. Failure to comply with this EU Directive may result in a negative impact on the environment.

4. Copyright

Copyright of these operating instructions remains with the manufacturer. Text and images correspond to the technical level at the time of going to press. We reserve the right to make changes. The content of the operating instructions shall not give rise to any claims on the part of the purchaser. We are grateful for any suggestions for improvement and notices of errors in the operating instructions.

myenergi zappi, myenergi eddi and myenergi harvi are registered trademarks of myenergi Ltd.

5. Overview

Microgeneration systems such as Solar PV and small wind turbines are at their most efficient when the generated energy is consumed on-site rather than exporting it to the grid. This is what we call 'self-consumption'.

zappi is a Mode 3 charging station, compatible with all electric vehicles that comply with EN 62196 and EN 61851-1 plug-in electric vehicle standards.

zappi works like any regular charging point but has special ECO charging modes that will benefit homeowners with grid-tied microgeneration systems e.g. wind or solar generation. Two special ECO charging modes automatically adjust charging current in response to on-site generation and household power consumption. In FAST charge mode, zappi operates like an ordinary EV charger.

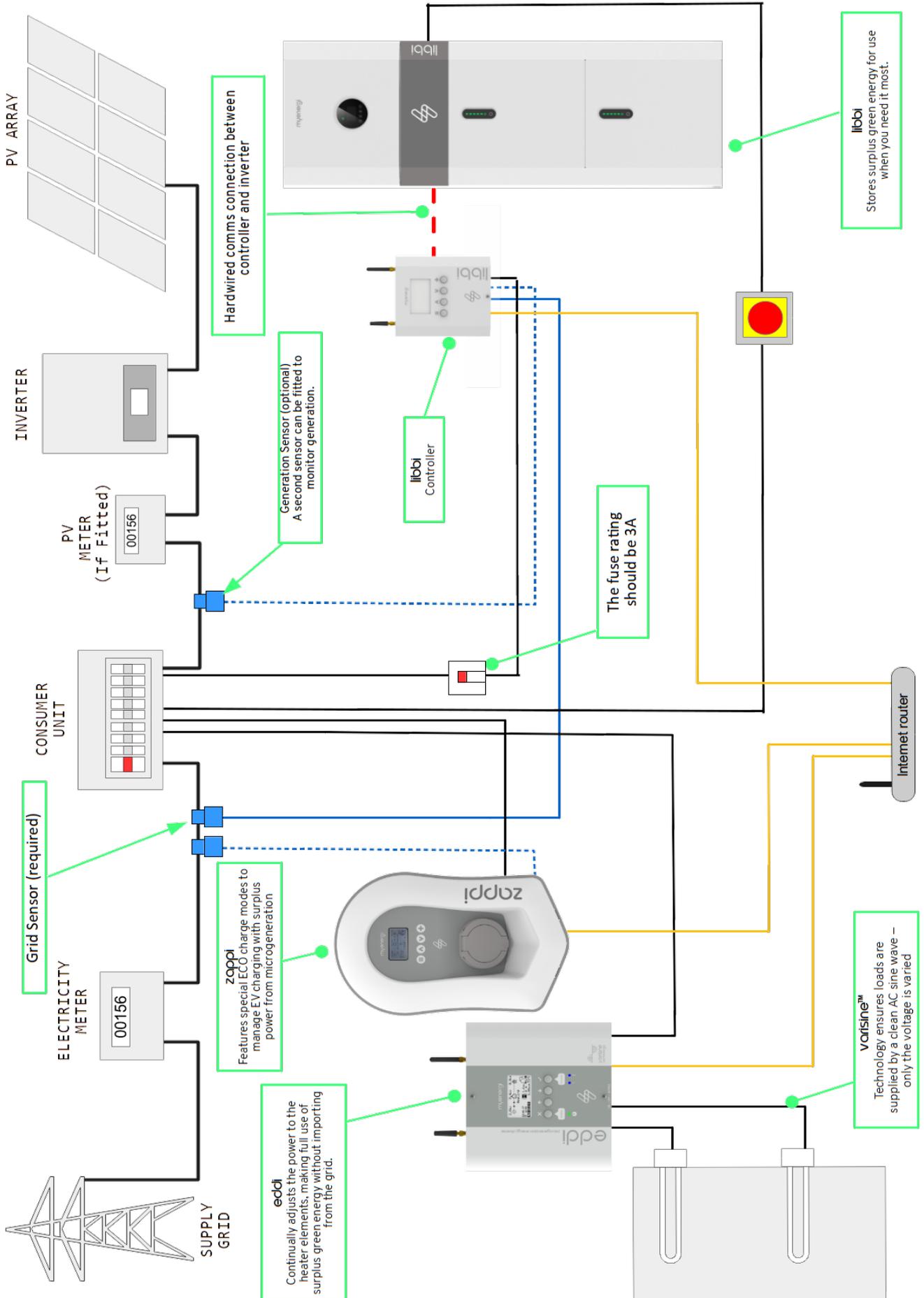
A grid current sensor (supplied) simply clips around the incoming supply cable and is used to monitor excess power. When using the special ECO charge modes, zappi will automatically adjust the charge rate in response to available surplus.

Feature Set

- 3 charging modes: ECO, ECO+ & FAST
- Optimises microgeneration self-consumption
- Works with solar PV, wind turbine or micro-hydro systems
- Economy tariff sense input
- Programmable timer function
- Charge and event logging
- Remote control and monitoring add-on option
- Pin-code lock function
- Tap operated display backlight
- Built-in protection against the loss of the protective neutral and earth (PEN) conductor as required by BS 7671:2018 Amendment 1:2020(The “Wiring Regulations”)
- Ethernet connector (for local communications between myenergi devices)
- Integral cable holster (tethered units)
- Supplied with 1 x clip-on grid current sensor (x3 if purchasing a 3-phase unit)
- Illuminated display – for convenience, the display can be illuminated by simply tapping the zappi front cover.
- Integrated WiFi for connecting to internet.
- Front Lid Tamper Detection

5.1 Overview Diagram

The diagram on the next page shows the zappi as part of a complete energy management system. Other myenergi products are shown with details of how they integrate with the grid connection and the microgeneration system.



6. Box Contents

Tethered Units

- 1 x zappi unit with EV cable and connector attached
- 1 x Cable wall guard
- 1 or 3 x CT clamps¹
- 1 x Mounting template
- 1 x Mounting kit for a brick wall

Mounting kit (Tethered units)

- 4 x 50mm Pozi screws
- 4 x Wall mounting plug
- 4 x Sealing washer
- 4 x 12mm Pozi screws (countersunk)

Untethered Units

- 1 x zappi unit
- 1 or 3 x CT clamps¹
- 1 x Mounting template
- 1 x Mounting kit for a brick wall

Mounting kit (Untethered units)

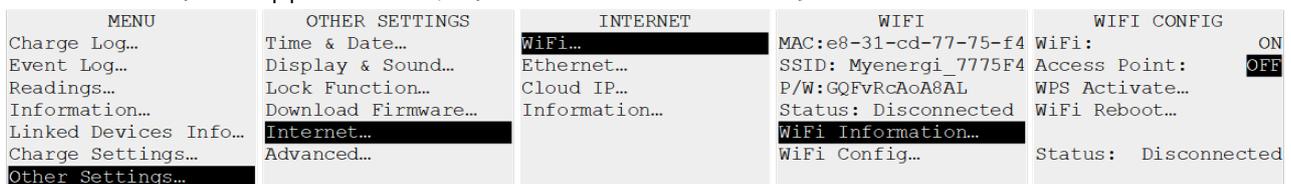
- 4 x 50mm Pozi screws
- 4 x Wall mounting plug
- 4 x Sealing washer

7. WiFi Set-up

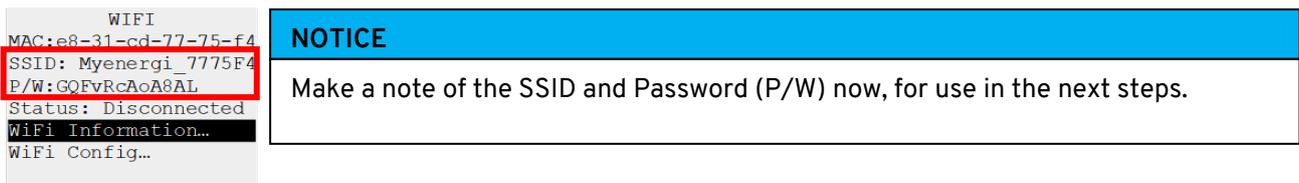
If WiFi was not available during your installation, your installer may have skipped this step. As soon as you have WiFi availability you can connect by following the steps below.

It is important to connect your zappi to the internet to install the latest firmware and receive any future firmware updates.

Step 1: Firstly, turn on the Access Point by navigating to **Menu > Other Settings > Internet > WiFi > WiFi Information** on your zappi device display. If Access Point is showing as “Off”, turn to “On”.



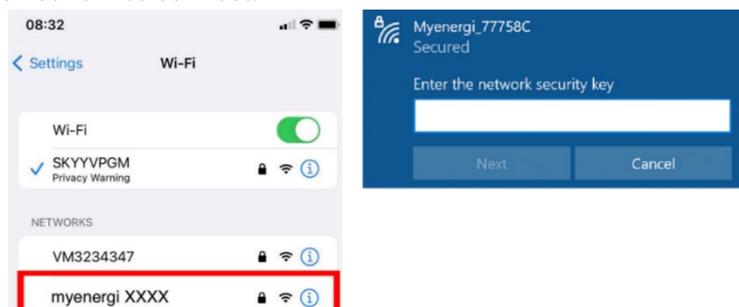
Step 2: Once the Access Point is set to “On”, go back to the “WiFi” page by pressing the (≡) button.



Step 3: Connect your smartphone or computer to the myenergi access point by entering your phone or computer WiFi Settings and searching for the network displayed with the same name as the SSID you noted down above. Once displayed, select the network to connect.

Step 4: You will be prompted for a password.

Enter the password displayed on the zappi screen that you noted down at step 2.



¹ 1xCT clamp supplied with single phase zappi; 3xCT clamps supplied with three phase zappi

Step 5: You will now be prompted to create a new password to protect the WiFi settings from being changed by anyone else. The new password must be at least 8 characters long and consist of a combination of lowercase and uppercase letters and digits.



NOTICE

If page doesn't load, type 192.168.4.1 into your web browser or mobile phone browser to enter WiFi setup screen.

Step 6: Wait 5 seconds for your password to change and the webpage to reload.

Step 7: Once connected, you will be directed to the webpage below where you will need to select your home WiFi network from the list in the "Detected Networks" box and type in your home WiFi's password to connect to your router.



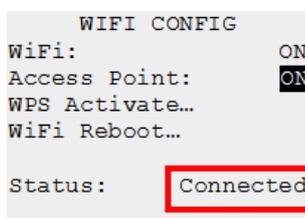
NOTICE

In most cases you should leave the "Show IP Settings" option unticked. However, if you want to give your zappi a fixed IP address then tick the "Show IP Settings" box and fill in the extra information required.

NOTICE

Please be patient. It could take up to 15 seconds for the connection to take place.

Step 8: Once complete, check WiFi is connected. Do this by navigating back to the WiFi Config Menu as you did at Step 1. Check Status is showing as "Connected".



8. Product Registration

8.1 First Time User? Register for an Account

If this is your first myenergi device your installer will talk you through the following simple steps to get your account up and running.

Step 1: Download the myenergi app



Android users can download the myenergi app on Google Play



Apple users can download the myenergi app in the App Store

1. Open the app and click, 'Register for an account'.
2. Enter an email address and create a password, when prompted.
3. Select your contact preferences then click 'next'.
4. Check the email you registered with for a verification code.
5. Enter the code into the app, where requested and press 'next'

Step 2: Set your location and add your first device

1. In the app click the green '+' symbol to add your first location.
2. When asked if you have a 'hub' select, 'No' as this is your first device which already has a built-in virtual hub (vHub).
3. Enter the 'Reg S/N' and 'Reg code' (These can be found in your zappi device settings; *menu > Information > Page 2*).
4. Once complete, your device will now display in your myenergi account and app.

Step 3: Customer Details

1. Visit myaccount.myenergi.com from a web browser.
2. Log in with the same credentials used to register for the app.
3. Click on 'My Dashboard'.
4. In the section titled 'Finish setting up your account', click 'Add account details'.
5. Click 'Edit personal info' and complete the form with the required information.
6. Click, 'Submit'.

Congratulations! You're all set. You can now use the myenergi app and myaccount to monitor your energy consumption in real time, wherever you are in the world.

8.2 Existing Users

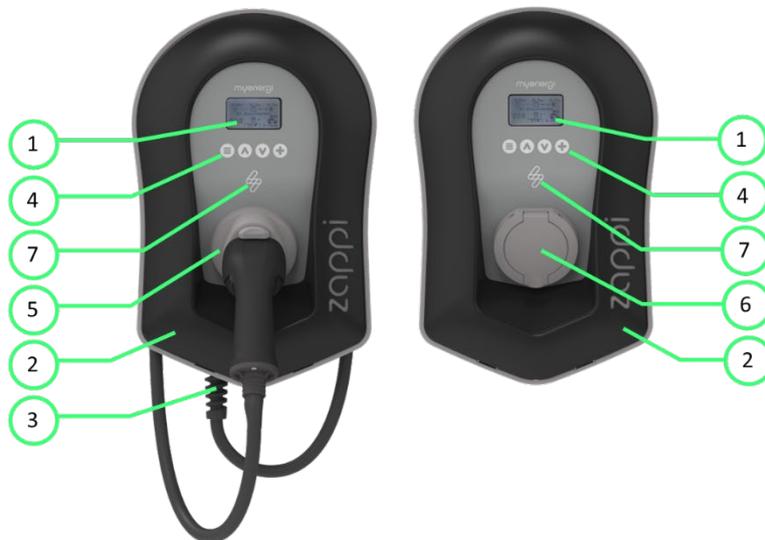
Already have a myenergi device and registered account?

1. Your installer will pair your new device to your existing system.
2. You will see your new device is automatically added to your myenergi account and app.



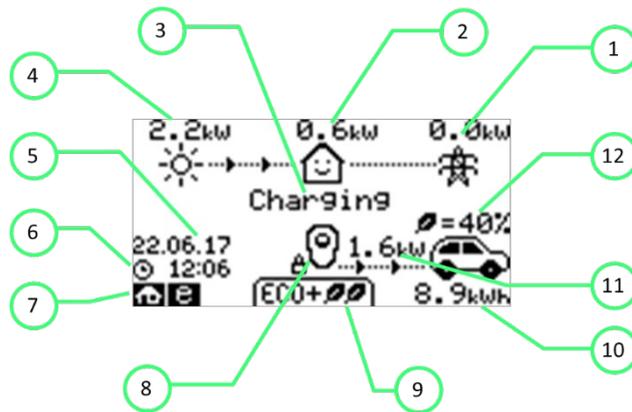
9. Operation

9.1 Controls & Indicators



1.	Display	Graphical LCD display with LED backlight <ul style="list-style-type: none"> Backlight can be activated by tapping the unit.
2.	Front Fascia	Remove fascia for installing and servicing
3.	Tethered Charging Cable if applicable	6.5-metre cable with a Type 2 plug or Type 2 socket with locking system for untethered models.
4.	Control Buttons	Four tactile buttons used to navigate the menus and alter settings: <ul style="list-style-type: none">  Menu  Change charge mode Move up a menu item Increase value  Change charge mode Move down a menu item Decrease value  Boost Select item Confirm value and move to next setting.
5.	Integrated Cable Holster (tethered units only)	When not in use, the charging cable should be wrapped around the unit and secured in the cable holster (tethered units).
6.	Charging Connection Point (untethered units)	When cable not in use, the charging cable should be unplugged and stored in a cool dry place.
7.	RGB Indicator	Visual Indicator that changes colour dependant on the zappi's charging state.

9.2 Display



1.	Import / Export Power	The power being either imported or exported from or to the grid (kW). The direction of the arrows indicates if the property is currently importing power (left) or exporting power (right). The size of the arrows is proportionate to the level of power being imported / exported, When the property is neither importing or exporting power the figure will be 0.0kW and there will no animated arrows. The property is then said to be 'in balance'.
2.	House Load Power	The power that the property is currently using in kW. (Note: This is displayed only when the Generation Sensor is installed directly to a CT input or a harvi or other myenergi device)
3.	Status Text	The current status is displayed here (see Status Screens)
4.	Generation Power	The power being generated at this time in kW. (Note: This is displayed only when the CTs are installed either hard wired to the CT inputs of the zappi or wirelessly to a harvi or other myenergi device)
5.	Lock Icon	Operation lock is active.
6.	Date & Time	The current date and time.
7.	Mode Icons	These icons indicate that the import limiting is active (house), Demand Side Response (~) or the eSense input is live (e)
8.	zappi Icon	If you see wavy lines above the zappi icon, the unit is thermally limiting! The output power is temporarily reduced.
9.	Charge Mode	Shows the selected Charging Mode; FAST, ECO or ECO+ (see Charging Modes)
10.	Charge Delivered to EV	The accumulated charge energy that has been sent to EV in this charge session.
11.	Current Charging Power	When the EV is charging, arrows will show here along with the charging power in kW.
12.	Green Level of Last Charge	This is the percentage of 'Green' energy for the last charge session, this is shown at the end of a charge or when the EV is unplugged.

9.3 Status Screens

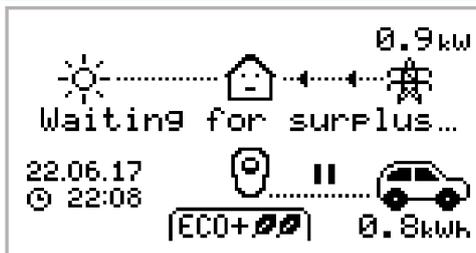
9.3.1 EV Disconnected



The EV is not connected to zappi.

In this example the last charging session delivered 20.8kWh of energy to the EV and 80% of that energy came from the solar panels.

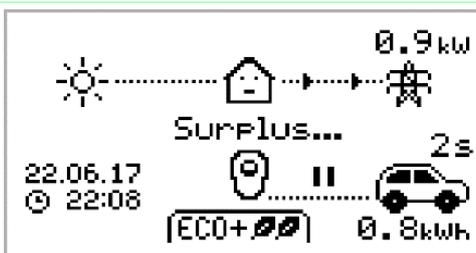
9.3.2 Waiting for Surplus



zappi is waiting for sufficient surplus power from the microgeneration system. This screen will be shown in ECO+ mode as it is only in this mode that charging will stop if there is not enough surplus power.

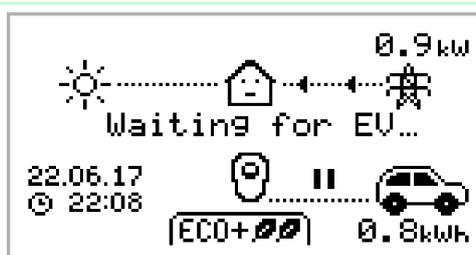
The house in the centre is straight-faced as grid electricity is being used by the house (0.9kW in the example shown).

9.3.3 Surplus



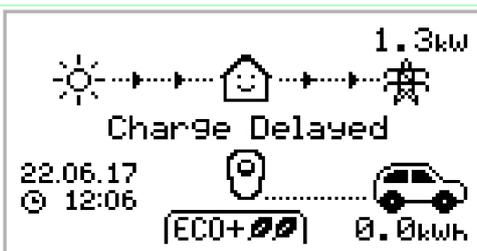
Enough surplus is available and zappi is about to charge the EV. A timer is decremented and can be set in the charge settings (ECO+ mode only).

9.3.4 Waiting for EV



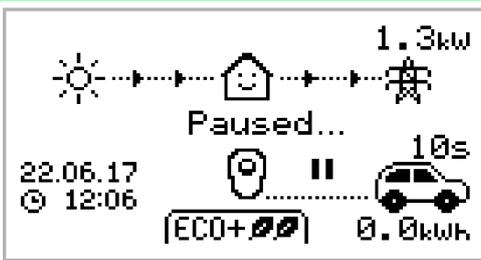
zappi is waiting for the EV to respond; the EV is not ready to accept charge.

9.3.5 Charge Delayed



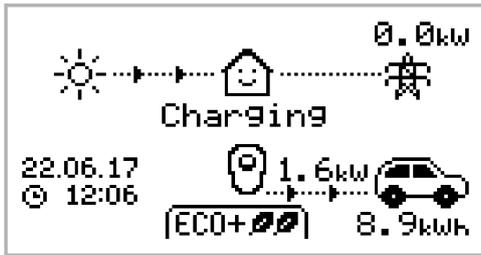
The charging session has been delayed by the EV because a scheduled charge has been set in the vehicle.

9.3.6 Paused



zappi is paused for a few seconds in order to limit the start/stop frequency during ECO+ mode charging.

9.3.7 Charging



The EV is charging.

In this example the car is charging in ECO+ mode at 1.6kW, there is no import or export from the grid (0.0kW) and the EV battery has charged by 8.9kWh since the car started.

9.3.8 Charge Complete



The EV is fully charged.

The charge energy used during the last charge is displayed at the bottom right (20.0kWh in this case) and the 'green contribution' is also shown (40% in this example).

9.3.9 Restart



zappi is performing a restart sequence.

This may happen with some EVs that need to be 'woken-up' to start charging after a pause in the charge. Charge should start immediately afterwards, otherwise the "Charge Delayed" message will appear.

9.3.10 Stopping



zappi is about to stop the EV charging

10. Charging Modes

zappi has three different charging modes and a “STOP” mode which can be selected simply by pressing the  and  buttons when the main screen is showing. The charge mode can be changed before or during a charge. Regardless of the charge mode, all the surplus electricity is used. zappi’s special eco charge modes limit the amount of grid electric used. Below is the explanation of each charging mode.



Charges at the fastest rate

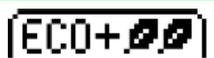
Fast Mode will charge the EV at the fastest rate and will import grid electricity if there is insufficient surplus generated power. The actual charge rate is dependent on the EV's onboard charger and the grid supply voltage. Some vehicles can charge at 11kW or 22kW on a 3-Phase zappi, but many EV's have lower charge rates. The maximum charge rate for the single phase zappi is 7kW.



Adjusts the charge rate to limit the use of grid electricity

The charge rate is continuously adjusted, in response to changes in generation or power consumption elsewhere in the home, thereby minimising the use of grid power. Charging will continue until the vehicle is fully charged, using available surplus power. If at any time, the available surplus power falls below 1.4kW, the shortfall will be drawn from the grid.

Note: The EV charging standard does not support below 1.4kW.



Adjusts the charge rate to limit the use of grid electricity and will pause the charge if there is too much or any grid electricity being used (Set-up Dependant)

The charge rate is continuously adjusted, in response to changes in generation or power consumption elsewhere in the home, thereby minimising the use of grid power. Charging will pause if there is too much imported power, continuing only when there is enough surplus power available. The surplus power threshold at which the charge will start or stop can be set using **Min Green Level** in the **ECO+ Settings** of the **Charge Settings** menu. The actual green contribution percentage is shown when the charge is complete or when the zappi has been disconnected from the EV. It is possible to charge the EV using only surplus renewable power, if there is sufficient surplus power available and a boost option has **not** been set. (**Please note: The EV charging standard does not support charging below 1.4kW**) Example: when zappi is set to a Min Green Level of 100% you will need in excess of around 1.4kW of surplus energy available to start the charge. If the surplus falls below the 1.4kW threshold the charge will pause until the threshold is once again met. After a short delay zappi will resume charge. If preferable, you can set the zappi to share power from the grid and a generation source to ensure a charge is always maintained. For example, the Min Green Level could be set to 75%. A charge will then start when there is a surplus of 1.05kW, taking a further 0.35kW from the grid. It is worth noting that this is only required to start a charge. If a higher amount of surplus becomes available it will be consumed, resulting in less being drawn from the grid.



The output from zappi is turned off

In STOP mode zappi will not charge your EV. **This includes the boost modes and timed boost.** zappi will continue to measure power and communicate with the other myenergi devices.



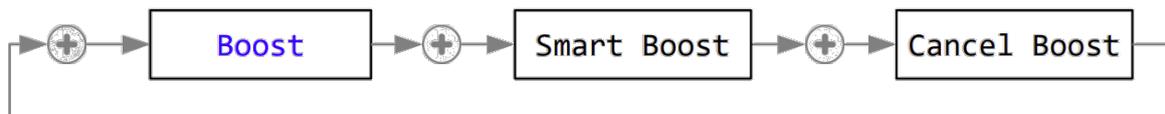
11. Manual Boost

The Manual Boost function can only be used when charging in ECO or ECO+ mode. When boosting, the charge rate is set to maximum (just like FAST mode), until a set amount of energy has been stored in the EV's battery. After which, zappi will revert to ECO or ECO+ mode.

This function is useful if you arrive home with an almost flat battery and would like to charge the vehicle immediately to ensure there is enough charge for a short trip if needed.

The amount of energy delivered to the EV during the boost charge can be changed in the Charge Settings/Boost menu.

When in ECO or ECO+ mode, each press of the button will cycle through the boost options as illustrated below:



12. Troubleshooting

Symptom	Cause	Solution
Display is blank	<ul style="list-style-type: none"> There is no power to the unit 	<ul style="list-style-type: none"> Check for correct supply voltage at the supply screw terminals (220 - 260V AC)
In ECO+ mode, the charge does not start, the display is always showing Waiting for Surplus and the export power is 0W	<ul style="list-style-type: none"> Grid Sensor incorrectly installed Faulty Grid Sensor No signal from harvi (if used) 	<ul style="list-style-type: none"> Check the grid sensor is connected to a CT terminal in the zappi or any CT input in the harvi Check the Grid CT sensor is installed on the correct cable (see CT Sensor Installation) Check resistance of the sensor - it should be around 200Ω when not connected (remove the sensor from the cable before testing resistance) If using harvi, check that the CT input has been set to Grid in the harvi settings (under Linked Devices / Devices in the zappi Advanced Settings menu)
In ECO+ mode, the charge does not start, the display is always showing Waiting for Surplus , yet the export power is showing correctly	<ul style="list-style-type: none"> Export Margin set too high 	<ul style="list-style-type: none"> Check Export Margin setting (default is 0W)
Generation power is always 0kW	<ul style="list-style-type: none"> Generation CT not installed 	<ul style="list-style-type: none"> Install generation sensor and connect to one of the CT inputs Alternatively, if there is no Generation CT, the Generation and House consumption figures can be hidden on the main screen by changing the Icons setting in the Settings / Display & Sound menu
Installation Limit ! displayed Display will show the phase(s) that is(are) overloaded and the prospective current that would be drawn if the zappi were allowed to start charge at the minimum current	<ul style="list-style-type: none"> The measured Grid Current is greater than the Grid Limit set in the zappi 	<ul style="list-style-type: none"> Check the Grid Limit setting Reduce the load in the property In a three phase installation, consider rebalancing the property load across the three phases

Installation Limit ! CT displayed	<ul style="list-style-type: none"> The Grid CT has become disconnected or is not clamped correctly around the grid supply cable 	<ul style="list-style-type: none"> Check CT is installed correctly.
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13. Fault Codes

If any of the following fault messages are displayed, follow the action described.

Displayed Message	Description	Action
Unknown Cable !	zappi has detected an unknown EV cable (untethered units only) Make sure you are using genuine IEC 62196-2 compliant plugs. Range supported: 32A, 20A and 13A.	zappi will automatically retest the cable after 5 seconds. If the issue persists, unplug the cable check for dirt in the plug and try again.
Pilot problem !	zappi has detected an issue with the “Control Pilot” signal on the cable between the zappi and the EV.	zappi will automatically retest the cable after 5 seconds. If the issue persists unplug the cable, check for dirt in the plug and try again.
Lock Failure ! Fault code 23	The socket lock actuator couldn't lock/unlock the inserted plug as expected (untethered units only).	This message can happen when the plug is not fully inserted or if it is twisted or pulled from the socket. Push the plug fully into the zappi to release the plug, then press and hold the  button to reset the unit.
Output Fault ! Fault code 24	zappi has detected a wrong output voltage. e.g. a voltage has been detected when it should be off.	Unplug the EV, press and hold the  button to reset the unit.
PE Fault ! Fault code 25	zappi has detected a problem with the main earth connection to the unit. The earth is either disconnected or the impedance of the earth connection is too high.	Unplug the EV, check the earth connection to the zappi and then hold the  button to reset the unit. If the electricity supply is “IT earthed” check the Supply Grid / Earthing menu setting.
Comms Fault ! Fault code 26	zappi has detected an issue with the built-in protection components.	Unplug the EV, press and hold the  button to reset the unit.
SelfTest Failed ! Fault code 27	The built-in protection devices couldn't be tested or failed the test prior to a charge.	Unplug the EV, press and hold the  button to reset the unit.
Contactors Fault ! Fault code 28	The relay inside the zappi has a welded contact. The secondary	Unplug the EV, press and hold the  button to reset the unit.

	relay is open to make sure that the supply to the EV is isolated.	
PEN Fault! Fault code 29	The internal protection against the loss of the PEN conductor on the electricity supply has tripped.	Unplug the EV, make sure that the fault has been removed then press and hold the ⌂ button to reset the unit.
Overload ! Fault code 30	The EV is drawing too much current – the output is switched off.	Unplug the EV, press and hold the ⌂ button to reset the unit.
Bad Voltage Range ! Over Voltage! Under Voltage! Fault code 31	zappi has detected that the supply voltage is too high/low and has disconnected the EV to protect it.	Unplug the EV, make sure that the fault has been removed and hold the ⌂ button to reset the unit.
Overheating!	The zappi unit is too hot – the output is switched off.	Make sure that the zappi is properly ventilated (e.g. has not been covered). Charge will resume once the unit has cooled down again.
Voltage Mismatch ! Fault code 32	The output voltage detected by zappi and the built-in protection components is not the same.	Unplug the EV, press and hold the ⌂ button to reset the unit
Charge Blocked !	zappi has detected that the EV has repeatedly tried to start a charge even though the EV has previously reached “Charge Complete” i.e. The battery is full, the battery has reached a charge level set in the EV, or the charge has been stopped by a timer in the EV.	Unplug the EV Charging will continue when the EV is plugged in again

If any of the above faults persist then stop using zappi and contact your supplier or myenergi Technical Support.

14. Warranty

Full details of the myenergi product warranty are available on our web site or by using this QR code.



15. Technical Specifications

15.1 Performance

Mounting Location	Indoor or Outdoor (permanent mounting)
Charging Mode	Mode 3 (IEC 61851-1 compliant communication protocol)
Display	Graphical backlit LCD
Front LED	Multicolour, according to charge status, current and user setting
Charging Current	6A to 32A (variable)
Dynamic Load Balancing	Optional setting to limit current drawn from the unit supply or the grid
Charging Profile	3 charging modes: ECO, ECO+ or FAST. STOP is a further option
Connector Type	Type 2 tethered cable (6.5m) or type 2 socket with locking system
Compliance	LVD 2014/35/EU, EMC 2014/30/EU, EN 62196-2:2017, ROHS 2011/65/EU, CE Certified, EN 61851-1:2019*

* *zappi* complies fully with EN 61851-1:2019 with the exception of Clause 8.4 in order to meet the requirements of BS 7671:2018 Amendment 1:2020 which requires the protective earth conductor to be switched in order to provide protection against a damaged PEN conductor in a TN-C-S earthed electrical system.

15.2 Electrical Specifications

Rated Power	7kW (1-phase) or 22kW (3-phase)
Rated Supply Voltage	230V AC Single Phase or 400V AC 3-Phase (+/- 10%)
Supply Frequency	50Hz
Rated Current	32A max
Standby Power Consumption	3W
Economy Tariff Sense Input	230V AC sensing (4.0kV isolated)
Wireless Interface	868 MHz / 915 MHz (-A units) proprietary protocol for wireless sensor and remote monitoring options
Grid Current Sensor	100A max. primary current, 16mm max. cable diameter
Supply Cable Entry	Rear / Bottom / Left side / Right side

15.3 Mechanical Specifications

Enclosure Dimensions	439 x 282 x 122mm
Protection Degree	IP65 (weatherproof)
Enclosure Material	ASA 6 & 3mm (UL 94 flame retardant) colours: white RAL 9016 and grey RAL 9006
Operating Temperature	-25°C to +40°C
Fixing Points	In-line vertical mounting holes
Weight	Single Phase Untethered: 3.0kg Three Phase Untethered: 3.3kg Single Phase Tethered: 5.5kg Three Phase Tethered: 7.2kg

15.4 Connectivity

WiFi 2.4 GHz 802.11BGN Connection up to 150 Mbps

WiFi Frequency Range 2412-2484 MHz

Radio Frequency Range 868-870MHz

Radio Frequency (Australia) 915MHz

15.5 Max Transmitted Power

Radio	25mW
WiFi	100mW

16. Model Variants

Model No.	Rating	Connector	Colour
ZAPPI-2H07UW-G	7kW	Untethered	White
ZAPPI-2H07TW-G	7kW	Tethered	White
ZAPPI-2H07UB-G	7kW	Untethered	Black
ZAPPI-2H07TB-G	7kW	Tethered	Black
ZAPPI-2H22UW-G	22kW (3-Phase)	Untethered	White
ZAPPI-2H22TW-G	22kW (3-Phase)	Tethered	White
ZAPPI-2H22UB-G	22kW (3-Phase)	Untethered	Black
ZAPPI-2H22TB-G	22kW (3-Phase)	Tethered	Black

Designed to permit installations compliant with IET Wiring Regulations BS 7671:2018 Amendment 1:2020 and the Electricity Safety, Quality, and Continuity Regulations 2002 and BS 8300:2009+A1:2010.

17. Technical Support

If you experience any issues with your zappi post installation, please contact our Technical Support Team by scanning the QR Code below.



Please contact us directly for the quickest solution.

Appendix A

Electric Vehicle (Smart Charge Points) Regulations 2021

As of 30th June 2022

Relevant to zappi INSTALLED from 30th June 2022

1. Electric Vehicles (Smart Charge Points) Regulations 2021

From 30th June 2022, any EV charger installed in a private setting i.e. home or workplace NOT public, in England, Scotland and Wales has to meet the Electric Vehicles (Smart Charge Points) Regulations 2021.

1.1 Purpose of the Regulations

The new smart charging regulations are a huge, positive forward-step by the UK Government in preparing our homes and businesses for a smart, connected and democratized energy system. Essential tools in driving down emissions and a core reason why myenergi exists.

The regulations are focused around when you are charging an EV. The aim of the regulations is to prevent everyone charging at the same time and putting too much demand on the grid.

1.2 What's changed with zappi

New features have been added to zappi to ensure our products remain compliant with UK Regulations.

These include:

- **Randomised Delay** – At the start of a charge and end of a scheduled, Timed Boost there will be a delay of up to 10 minutes before your vehicle starts and stops charging. This could be a few seconds or it could be up to the full 10 minutes. This is necessary to ensure everyone does not overload the grid by starting to charge or ending a charge at the same time. The Randomised Delay can be overridden, if necessary (See 1.3.2 for further details).
- **Smart Scheduling** – To comply with the smart charging regulations your zappi will be set to charge in off-peak hours by default. This is between 00:00 – 08:00. You may change this schedule at any time if you would prefer to charge in peak hours or your electricity tariff off-peak hours differ from those set.
- **Default to ECO+ mode** – If Smart Regulations apply, zappi will default to ECO+ mode on first boot up.
- **Charging logs** – You will now be able to view a record of charging logs from the past 13 months. See Charge Logs section below for further information.

1.3 Randomised Delay: How it works

As mentioned above, Randomised Delay will put a completely random delay at the start of a charge and end of a scheduled, Timed Boost, for up to 10 minutes. This can be overridden by the customer in situations where they are in a hurry.

1.3.1 Delay Status

You will be able to see if your charger is in a state of delay at any time as it will be displayed on both the zappi screen and in the myenergi app.

1.3.2 Overriding the delay

To override the delay simply press the ‘+’ button on the zappi or press the ‘charge now’ button displayed in the pop-up message within the myenergi app. If the delay is overridden your charge will start/stop immediately.



You cannot permanently override the delay function. If you wish to override the delay each time you charge, you will need to follow the above instruction to override on every applicable charging session.

1.4 Smart Scheduling: How it works

As summarised under section 1.2 your zappi will be set to charge in off-peak hours by default from initial start-up.

1.4.1 Off-peak hours

Off-peak hours are usually between 00:00 – 08:00, depending on your specific tariff, this is when your electricity will be at it’s cheapest.

1.4.2 Reason for Smart Scheduling

Encouraging you to charge in off-peak hours prevents overloading the grid in peak times.

1.4.3 Benefits of Smart Scheduling

Smart Scheduling will can help you spend less on your electricity. By charging in off-peak hours your electricity tariff may be cheaper.

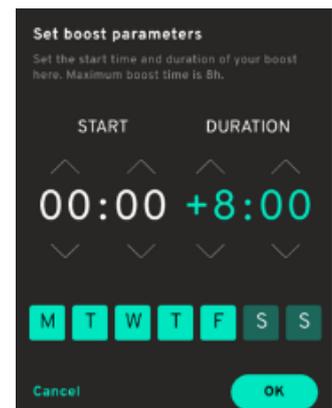
1.4.4 Changing the set schedule

If the default schedule does not suit your requirements, or your electricity tariff’s off-peak hours differ from the schedule set, you can amend your schedule at any time from the zappi menu or within the myenergi app.

To adjust your schedule in the app navigate to the ‘Set Boost Parameters’ option, select start time and set the number of hours you want your charger to boost for.

To change the schedule on your zappi device navigate to ‘Charge Settings > Boost Timer’ and amend the schedule as desired. *For further information see the Timed Boost section of the User Manual.*

Alternatively, the schedule may be deleted altogether, if required. To do this ensure all inputs are set to 00:00 for each day of the week.



1.5 Defaulting to ‘ECO+’ Mode

As mentioned in section 1.2 if your zappi meets the Smart Regulation parameters it will default to ECO+ mode upon first start-up. This can be changed to ECO+ or FAST mode at any time by the customer. *See Charging Modes section of the User Manual for further information on modes.*

1.5.1 Manual Boost

If you choose to remain in ECO+ mode you can still charge from the grid at any time by doing a Manual Boost. Refer to Manual Boost section of the User Manual for further information on this existing feature.

1.6 Charging Logs

Providing your zappi is internet connected and you have registered your device in myaccount you will be able to view a record of charge logs for the last 13 month period. This function will begin from 30th June 2022 so the earliest time you will see the whole 13 months will be from July 2023 or 13 months from when your device was connected to the internet. The charge logs will tell you when the charge started, when the session ended and the duration of each session.

To view your logs log into your account at <https://myaccount.myenergi.com/login>

Navigate to “My Energi Usage” in the left hand menu. The charge logs will be displayed like to example below.

Plugged	Unplugged	Active time	Charged	Green%
2021-06-17 10:24	2021-06-18 10:24	4h 13m	12 kWh	67%
2021-06-17 5:45	2021-06-17 10:24	4h 2m	10 kWh	55%
2021-06-16 16:33	2021-06-17 10:24	4h 13m	12 kWh	43%
2021-06-15 15:23	2021-06-16 10:24	6h 32m	10 kWh	11%
2021-06-14 20:01	2021-06-15 10:24	13h	16 kWh	22%

Appendix B

Electric Vehicle (Smart Charge Points) Regulations 2021

As of 30th December 2022

Applies to all zappis Installed on or after 30th December 2022

2. Electric Vehicles (Smart Charge Points) Regulations 2021

In addition to the regulations explained in Appendix A, from 30th December 2022, any EV charger installed in a private setting i.e. home or workplace NOT public, in England, Scotland and Wales has to meet FURTHER conditions to the Electric Vehicles (Smart Charge Points) Regulations 2021.

2.1 Purpose of the Regulations

Every day cyber criminals make attempts to target individuals and organisations. With a cyber attack attempted every 39 seconds these regulations have been put in place to mitigate the risk of this and ensure your device and information is secure from increasingly sophisticated attacks.

2.2 What's changed with zappi

The following features have been added to all zappis to comply with the Electric Vehicles (Smart Charge Points) Regulations 2021, Schedule 1, from 30th December 2022:

Set-up Wizard – The set-up wizard at power up has been changed to ensure smoother initial set-up. This includes internet connection and firmware updates upon start up.

Automatic Firmware Checking – zappi will regularly check for new software and will automatically display a message on your zappi screen to let you know in the myenergi app when updates are available.

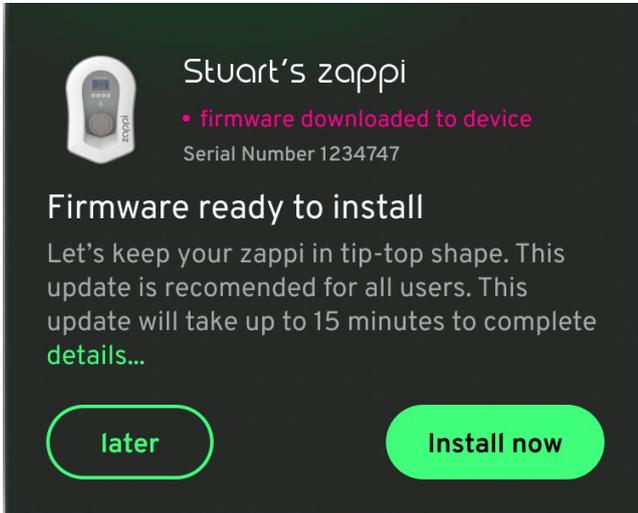
Tamper Detection – We have added built-in tamper detection to alert you if anyone has removed the front cover of your zappi. You will be alerted in the myenergi app when tamper activity is detected.

Encryption – To protect your data from eavesdroppers zappi uses Advanced Encryption Standard (AES) to securely communicate throughout your home and across the internet.

2.3 Automatic Firmware Checking

Being on the latest firmware is one crucial way to prevent security breaches. To ensure you are always on the most up-to-date firmware, your zappi will regularly check for new software and you will be notified in your myenergi app when updates are available.

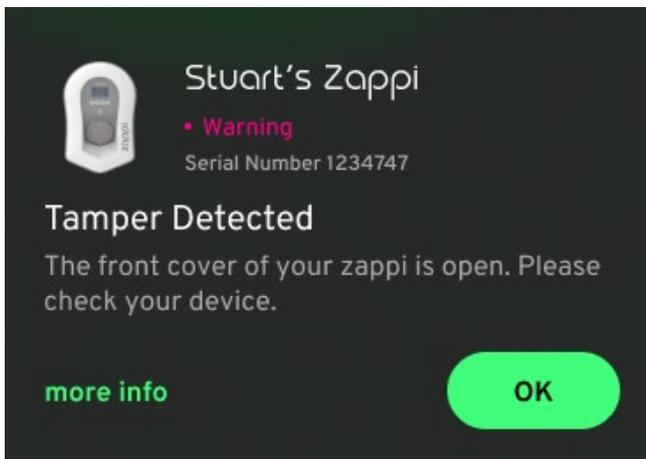
You then have the option to select “Install now” or “later”.



NOTICE
Firmware updates can only be delayed up to 3 times.

2.4 Tamper Detection

A tamper detection feature has been added to our zappi devices. This ensures that any time the cover is removed from your zappi you will be alerted that it has been tampered with.



2.5 AES Encryption

To protect your data from eavesdroppers zappi uses Advanced Encryption Standard (AES) to securely communicate throughout your home and across the internet.

Linked devices will communicate via AES and communication between your devices and the internet will also be via AES.

For customers with older myenergi devices that don't have the compatibility to communicate in encryption there is a new device menu setting which allows you to turn off encryption. If encryption is turned off this will only turn off encrypted communication locally between devices. Communication externally across the internet will still use encryption.

2.6 Installer Requirements

It is the responsibility of the installer to ensure they are compliant with Electric Vehicles (Smart Charge Points) Regulations 2021. This includes, but is not limited to:

- Installing only compliant charge points in private installs from and including 30th December 2022.
- Answering the start-up wizard questions accurately to reflect actual install parameters.
- Having a Technical File and/or Declaration of Compliance available if requested by the customer (myenergi's Technical File and Declaration of Compliance is available at: <https://myenergi.com/guides/smart-charge-point-regulations-explained/>)

The installer should ensure they are fully aware of and understand how the regulations affect them and what they are required to do to ensure they comply. These regulations should be monitored for any future updates. For further information or to view the current Electric Vehicles (Smart Charge Points) Regulations 2021 visit:

<https://www.legislation.gov.uk/ukdsi/2021/9780348228434>

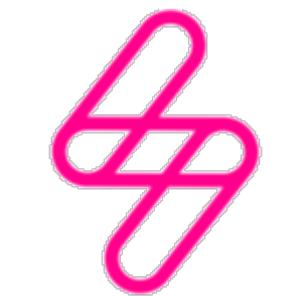
or

<https://www.gov.uk/guidance/regulations-electric-vehicle-smart-charge-points>

Further information can also be found by following the QR code below which will take you to myenergi's Smart Regulations webpage which contains reference documents, FAQs and simplified explanations of the regulations.



<https://myenergi.com/guides/smart-charge-point-regulations-explained/>



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