

Technical File

The Electric Vehicles (Smart Charge Points) Regulations 2021

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This document is the technical file for the following charge point:

Charge point make:	myenergi
Charge point model:	ZAPPI-2H07UW ZAPPI-2H07UB ZAPPI-2H07TW ZAPPI-2H07TB ZAPPI-2H22UW ZAPPI-2H22TW ZAPPI-2H22UB ZAPPI-2H22TB ZAPPI-2H07UW-G ZAPPI-2H07UB-G ZAPPI-2H07TW-G ZAPPI-2H07TB-G ZAPPI-2H22UW-G ZAPPI-2H22TW-G

Software version at point of sale: Seller: <i>Person responsible for compliance with the Regulations</i> Manufacturer(s): <i>If different to seller</i> Last update to technical file:	ZAPPI-2H22UB-G
	ZAPPI-2H22TB-G
	From V4.500
	myenergi Ltd, Pioneer Business Park, Faraday Way, Stallingborough, Grimsby, DN41 8FF, UK
	N/A
	29/11/2024

Description of the smart charge point

This page outlines the general description of the charge point, including a description of its design, manufacture, and operation.

zoppi is a MODE 3 electric vehicle charger, designed for use in residential applications. It is manufactured in 16 model variations, for the UK market:

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

‘-G’ variants of zoppi include a built-in tamper detection device. Non ‘-G’ variants require a retrofit kit to be installed on or after 30th December 2022, to be compliant with Schedule 1 (Security) of the Smart Charge Point Regulations.

zoppi has a built-in user interface with an LCD display, which can be used in conjunction with the myenergi app and myenergi account to control the charge point.

zappi is part of myenergi’s range of eco-smart products, which aim to maximise the use of self-generated electricity, from solar or wind power (although there is no requirement to have your own generation to use zappi). It can be used standalone, or in conjunction with other myenergi devices.

zappi is designed at myenergi’s facility in Grimsby and manufactured in the United Kingdom. zappi is designed and tested in accordance with the product standard EN IEC 61851-1.

zappi complies with the following standards:

LVD 2014/35/EU, EMC 2014/30/EU, EN 62196-2:2017, ROHS 2011/65/EU, CE Certified, EN 61851-1:2019

A full technical specification can be found at: https://support.myenergi.com/hc/article_attachments/23598946568209

Operating manual

Copy of operating manual as available at point of sale can be found (cross as appropriate):		Attached to this document (hard copy)
		Attached to this document as a digital file (soft copy)
	X	Available online via hyperlink (soft copy)
Link if available online:	Current Version of manual: https://support.myenergi.com/hc/en-gb/articles/20495580446865-zappi	
Version of file received at point of sale if available online:	R2.1.6	

Technical solutions implemented to meet the requirements of the Regulations

Smart functionality

Requirement	Technical solution adopted to meet the requirement
<p>Charge point is able to send and receive information via a communications network</p>	<p>zappi is connected to the internet through your home broadband connection. Depending on your installation this can be achieved by:</p> <ol style="list-style-type: none"> 1. Using zappi's onboard WiFi or Ethernet to connect to your home broadband router. 2. The myenergi hub, which communicates between zappi, other myenergi devices and your home broadband router. (This is the case if you have a physical myenergi hub). 3. By using another myenergi device in your home, which acts as a virtual hub for all myenergi devices in your property. <p>The information flow between zappi and myenergi is bidirectional, allowing zappi to send information to myenergi servers and myenergi servers to send commands to zappi.</p>
<p>Charge point is able to respond to signals or other information received by it by:</p> <ul style="list-style-type: none"> • Increasing or decreasing the rate of electricity flowing through the charge point • Changing the time at which electricity flows through the charge point 	<p>Your zappi can communicate with myenergi servers over an internet connection. Your charge point is capable of receiving commands from myenergi's systems to increase or decrease the electricity flowing through the charge point. Commands can also be used for adjusting the scheduled charging periods (Boosts). These commands also include the ability to remotely start or stop charging.</p> <p>zappi can be controlled by the myenergi app, which sends commands to myenergi servers over an internet connection.</p> <p>Where your zappi is enrolled in a Demand Side Response service (DSR) zappi is able to interpret commands from the myenergi server, to adjust its charging behaviour.</p>
<p>Charge point is capable of using this functionality to provide demand side</p>	<p>Your charge point can receive commands from myenergi servers, which allow it to take part in demand side response services (DSR).</p>

<p>response services, including response DSR services</p>	<p>Demand side response services involve signals being sent to your charger to increase or decrease the flow of electricity, through the charger, in response to changes on the electricity grid.</p> <p>These services include load reduction (reducing the amount of electricity flowing through the charge point) and frequency response services. (Increasing or decreasing electricity flowing through the charge point, in response to the frequency of the electricity grid).</p> <p>DSR is an optional feature, by default you will not be opted into DSR Services. You can opt into, or out of DSR Services in the myenergi app. The feature is currently in Beta and may not be available to all users, however this does not affect your charger's ability to take part in DSR services in the future.</p> <p>You can also provide your electricity tariff information in the myenergi myaccount and zappi will schedule a charging session based on this information, and the time your vehicle needs to be ready by. Pricing can be set for each 30 minute time period.</p>
<p>Charge point has at least one user interface, incorporated in the charge point or otherwise made available to the owner</p>	<p>myenergi offers three (3) user interfaces for use with the zappi charger:</p> <ul style="list-style-type: none"> • zappi has a built-in user interface (LCD Screen) with physical buttons, which allows the adjustment of charging settings directly on the device. • The myenergi app, which is available for iOS and Android devices. • The myenergi myaccount, which is a web portal that can be accessed from a web browser on your phone, tablet, or computer. https://myaccount.myenergi.com <p>The myenergi app can be used for monitoring and controlling charging sessions. The myenergi app allows the following functionality, with regards to the smart charging regulations:</p> <ul style="list-style-type: none"> • Ability to remotely start and stop charging sessions. • Ability to override randomised delay. • Ability to change or remove the default off-peak charging schedule.

	<ul style="list-style-type: none"> • Ability to reinstate the off-peak charging schedule if it has been removed. <p>The myenergi myaccount can be used to download up to 13 months of charging history for your zappi. Charging history can be viewed on a line-by-line basis and exported in CSV or Excel file types.</p>
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Electricity supplier interoperability

Requirement	Technical solution adopted to meet the requirement
Charge point is configured such that it will not cease to have smart functionality if the owner changes their electricity supplier	<p>zappi works with all UK energy providers - your charge point will work regardless of your energy provider. If you move suppliers your charge point will be unaffected, and your smart charging settings will remain the same.</p> <p>If you use the optional zappi features, such as matching your charging schedule to your electricity tariff, you can update your energy tariff in the myaccount portal. https://myaccount.myenergi.com</p>

Loss of communications network access

Requirement	Technical solution adopted to meet the requirement
Charge point is configured such that, in the event it ceases to be connected to a communications network, it will remain capable of charging an electric vehicle	<p>zappi is designed to work without an internet connection. However, we recommend keeping your zappi connected to the internet, so you can benefit from additional features and firmware updates.</p> <p>zappi has a built-in user interface (screen and buttons), which can be used to start and stop charging, as well as adjusting charging settings, without the need for an internet connection. Features such as load management, use devices that are physically installed in your home and do not require the internet to operate. These features are usually hardwired or communicate over a local radio network within your home.</p> <p>If there is a problem with the internet connection, zappi will continue to operate and can be used to charge an EV using the local controls if needed.</p> <p>zappi stores charging history on the device for a period of up to 7 days, on re-establishing a connection to the myenergi servers, zappi will attempt to upload charging</p>

	history, that happened during the communications failure, ensuring charging data is not lost.
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Safety

Requirement	Technical solution adopted to meet the requirement
<p>Charge point is configured such that it will not allow a relevant person to carry out a specified operation where to do so would or may result in a risk to the health or safety of persons.</p> <p>“Relevant persons” means the owner, or an end-user of the relevant charge point who is not the owner.</p> <p>“Specified operation” means:</p> <ul style="list-style-type: none"> • Overriding the default mode of charging during the default charging hours • Overriding the provision of demand side response services • Overriding the random delay 	<p>zappi is designed and tested in accordance with the Product Standard IEC EN 61851-1:2019.</p> <p>Once installed and commissioned it will operate safely in any of the modes provided. Changing the mode, changing the default charging hours, overriding the provision of demand response services, or overriding the random delay can all be done safely by the end user, from the built-in display or by the app.</p> <p>Should zappi identify a situation that poses a safety risk, zappi will enter a fault mode. The fault mode is indicated by a red myenergi logo on the front of the device and a fault message will be displayed on the screen.</p> <p>The user will be required to carry out a reset procedure, after they have investigated and rectified the fault. This reset procedure requires the user to physically press and hold a button on the device, before the zappi can be used for charging an electric vehicle again. In fault mode, the ability to override the ‘specified operations’ is not possible, and charging will be stopped.</p> <p>zappi will also ensure that installation limits, that have been set at your property, (such as a grid limit) are not exceeded by carrying out a specified operation. In the event that they are, zappi will prioritise the installation limits over the ‘specified operations’</p>

Measuring system

Requirement	Technical solution adopted to meet the requirement
On each occasion it is used, the charge point measures or calculates:	zappi includes a metering circuit Load and external CTs designed in accordance with Class B (1%) of EN 50470.

<ul style="list-style-type: none"> • The electricity it has imported or exported (in watt-hours or kilowatt-hours) • The amount of time for which it is importing or exporting electricity 	<p>zappi: 0.25-5(32)A eCTs : 0.25-5(100)A</p> <p>Energy (kWh) delivered to the EV is displayed on the zappi and communicated to the myenergi server, so that it can be viewed by the end user in the charge history, in their online account: https://myaccount.myenergi.com</p> <p>The charging history also provides details of when the vehicle was plugged in and out, and the duration that electricity was flowing through the charge point.</p> <p>You can also view your charging history on the zappi user interface.</p>
<p>The charge point is configured such that the owner can view the information in reference to:</p> <ul style="list-style-type: none"> • Any occasion on which it was used to import or export electricity within the past 12 months • Any month within the past 12 months • The entirety of the last 12-month period 	<p>myenergi account (https://myaccount.myenergi.com) will display charging history to the end user, detailing the following for each charging session:</p> <ol style="list-style-type: none"> 1. Plugged in / Unplugged: Time and Date 2. Number of kWh delivered 3. Active time charging (Amount of time that electricity was flowing through the charge point). <p>These logs will show historical data, for a period of 13 months beginning from 30th June 2022. Customers can view and export charging data on a line-by-line basis. The charging history will also be filterable to a weekly, monthly or a user defined time period, including the last 12 month period.</p>
<p>The charge point is configured such that it can:</p> <ul style="list-style-type: none"> • On each occasion it is used, measure or calculate every one second the electrical power it has imported or exported (in watts or kilowatts) • Provide this information via a communications network 	<p>zappi measures the energy delivered to the electric vehicle every second, this is achieved by a metering circuit which is designed in accordance with the Measuring Instrument Regulations (EN 50470-1/3 Class B).</p> <p>Energy (kWh) delivered to the EV is displayed on the zappi screen and communicated to the myenergi server using the end user's home broadband connection.</p>
<p>The charge point is configured such that:</p>	<p>zappi includes a meter circuit which measures energy delivered to the vehicle, designed in accordance with Class B (1%) of EN 50470.</p>

<ul style="list-style-type: none"> • The figures measured or calculated are accurate to within 10% of the actual figure • Any inaccuracies are not systematic 	<p>Each zappi is tested in our manufacturing facility to ensure its accuracy is within specification, and error monitored to ensure that no systematic error exists.</p>
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Off-peak charging

Requirement	Technical solution adopted to meet the requirement
<p>The charge point:</p> <ul style="list-style-type: none"> • Has pre-set default charging hours which are outside of peak hours • Offers the owner the opportunity to accept, remove, or change the default charging hours on first use • Offers the owner the ability to change, remove, or set default charging hours any time after first use <p>Unless the charge point is sold with a DSR agreement, configured to comply with the requirements of this agreement, and details of the agreement are included in the statement of compliance.</p>	<p>During first setup, zappi will enter an installation wizard, using zappi's built-in display and buttons. The wizard will ask your installer a series of questions to understand if zappi is being installed in a scenario, where smart charging regulations apply.</p> <p>Based on the answers, zappi will automatically be configured to charge between 12:00am (Midnight) and 08:00am.</p> <p>Your zappi will also be configured in ECO+ mode by default, in this mode your charger will only charge in the following two scenarios:</p> <ol style="list-style-type: none"> 1. During the schedule that you set on zappi or in the app. If you did not change the default schedule, this will be between 12am (Midnight) and 8am. 2. When surplus self-generation (wind or solar) is available. <p>Users can (at any time):</p> <ol style="list-style-type: none"> 1. Do nothing, and accept the default off-peak charging period 2. Change the off-peak charging period in the myenergi app 3. Remove the off-peak charging schedule, by going to the 'scheduled boost' section in the myenergi app. 4. Change the default mode of zappi If the default mode is changed to 'Fast', zappi will default to this charging mode each time a vehicle is plugged in, and will ignore any schedules set. 5. Reinstate the default off-peak charging hours in the myenergi app. By default, a timed boost will

	<p>suggest the hours of 12am (midnight) and 8am, Monday to Friday, as the schedule. This schedule can be changed by the user to meet their requirements.</p>
<p>The charge point is configured:</p> <ul style="list-style-type: none"> • To charge a vehicle during the default charging hours (if any), unless the owner overrides the default mode of charging during this time • Such that the owner can override the provision of demand side response services 	<p>zappi will be configured in ECO+ mode by default. In this mode zappi will only charge during your set schedule, or when surplus self-generated solar or wind is available. The user can override the default charging period by switching to ‘Fast mode,’ by setting a manual boost in the myenergi app.</p> <p>Users can change the default mode of zappi in the charge settings menu on zappi.</p> <p>Customers can override and opt in /out of DSR services in the myenergi app.</p>

Randomised delay

Requirement	Technical solution adopted to meet the requirement
<p>The charge point is configured such that it must operate, at each relevant time, with a delay of random duration up to 600 seconds, determined to the nearest second each time.</p>	<p>zappi has a randomised delay function, which is built into the device. This delay will activate if the electricity flowing through the charge point, from the electricity grid, is increased or decreased. zappi will calculate a delay to the nearest second, using a random number generator when:</p> <ol style="list-style-type: none"> 1. Your zappi reaches the start of your scheduled charging time, where electricity is due to start flowing through the charge point. 2. Your zappi reaches the end of your scheduled charging time. 3. When plugging in using fast mode. <p>The delay calculated can be up to 600 seconds (10 minutes) The delay is purely random and will differ each time. The delay in seconds is displayed on the zappi screen.</p> <p>Randomised delay will not be active in scenarios where zappi is decreasing the electricity flowing through the</p>

	charge point, in order to maintain installation limits set at your property. (Such as a grid limit)
The charge point is configured such that the maximum duration of this delay can be remotely increased to up to 1800 seconds if required.	Your zappi is capable of firmware updates using its internet connection. Should the UK Government decide to increase the delay in the future, your device will be issued a firmware update to increase the maximum length of the randomised delay.
<p>The charge point is configured such that the random delay will not operate where:</p> <ul style="list-style-type: none"> • The owner or another relevant end-user has manually overridden it • An equivalent random delay has already been applied to the operation of the relevant charge point • The charge point is responding to a response DSR service 	<p>Randomised Delay can be overridden by pressing the ‘+’ button on the zappi. This will cancel the delay and the vehicle will start or stop charging from the electricity grid immediately. The delay at the start of a charging session can also be overridden by switching to fast mode from ECO or ECO+, <u>after</u> the electric vehicle has been plugged in.</p> <p>The randomised delay can also be overridden in the myenergi app. An in-app notification will appear when a randomised delay is active. The user can override this delay, and start charging immediately, by pressing the ‘charge now’ button on the notification.</p> <p>A user can override randomised delay, at the end of their charging session in the myenergi app, by pressing the ‘end now’ button</p> <p>When responding to DSR services, randomised delay does not apply.</p>

Security


At myenergi we’re passionate about ensuring that your zappi is secure and meets industry best practice, to protect against cyber-attacks. This part of our technical file explains the technical measures we have implemented in order to protect you, your home, and the energy grid from cybercrime. We appreciate that this can get technical, so for each section we have detailed the technical implementation and what this means for you in plain English.

Requirement	Technical solution adopted to meet the requirement
<p>General principles</p> <p>The charge point is designed, manufactured, and configured to provide appropriate protection:</p> <ul style="list-style-type: none"> • Against the risk of harm to, or disruption of the electricity system • Against the risk of harm to, or disruption of, the charge point • For the personal data of the owner and any other end-user of the relevant charge point 	<p>Your zappi is designed to protect you, your data, and the energy grid from harm.</p> <p>Your zappi has several security features which are designed to deter local or remote attacks on your zappi. The following principles have been applied to protect you:</p> <ul style="list-style-type: none"> • Where data is sent from zappi it will be encrypted using industry standard, robust cryptographic methods. This means your data is unreadable and can't be modified by third parties, during transit between your zappi and our servers. This principle also applies for using any of our services that require an internet connection (such as myaccount or the myenergi app). • We store sensitive and personal data in a secure manner and ensure appropriate access rights are in place. We store data in line with industry best practice. Sensitive user credentials such as passwords are stored using strong, industry standard hashing algorithms. • You can remove your data from our services at any time in accordance with our Privacy Policy: https://myenergi.com/terms-and-conditions/privacy-policy/ • Your zappi performs checks on the software it attempts to run. It will not accept software from untrusted sources (non-myenergi), or where the integrity of the data cannot be guaranteed. • New security threats are constantly evolving, therefore your zappi is capable of secure over the air software updates, to protect against emerging threats, as well as providing feature updates. • Your zappi is designed to take necessary action, such as to disconnect from a communications network, or suspend charging operations,

	<p>when such attacks pose a risk to you, your home, or the electricity grid.</p> <ul style="list-style-type: none"> • If your zappi was installed on or after 30th December 2022, it is also designed to protect against attackers physically tampering with your zappi, and incorporates a monitoring and alerting system, to detect and deter such attacks. <p>Your zappi is set up, so that by default such security features are switched on.</p>
<p>Passwords</p> <p>The charge point is configured such that where passwords are used on it:</p> <ul style="list-style-type: none"> • The password is unique to the charge point and not derived from, or based on, publicly available information, or is set by the owner • The password cannot be reset to a default password applying to both the charge point and other charge points 	<p>You can choose to protect your device using a 5-digit PIN code which you must enter on zappi. Enabling this feature will require the 5-digit PIN code to start charging or to access the settings of the zappi. You can turn this feature on in the system settings. We recommend you do this for greater protection.</p> <p>Your zappi WI-FI access point is protected by a unique password. The WI-FI access point's SSID (network name) and password is randomly generated and stored on the zappi each time the WI-FI configuration is reset. Neither the access point name nor the password has any relationship to information which is publicly available.</p> <p>Your zappi is provided with a unique Registration Code, which is required when adding your zappi to the myenergi app. Once this Registration Code has been used, it cannot be used again until the corresponding zappi is removed from the myenergi app.</p> <p><u>What this means for you:</u> It's important that passwords are protected; think of them like keys to your home. Our method above means your zappi uses a password which is unique (not used by any other zappi).</p>
<p>Software</p>	<p>Your zappi will download software over a connection which is encrypted using AES (Advanced Encryption Standard).</p>

<p>The charge point incorporates software, which is able to be securely updated using adequate cryptographic measures to protect against cyber attack</p>	<p>Your zappi will only install software over this secure connection. This allows your zappi to check:</p> <ul style="list-style-type: none"> • The software has come from a trusted source (myenergi). • The software has not been modified or tampered with. <p>Your zappi will check that the update has not been modified before installing. If the firmware is found to be modified, or the software is corrupted, zappi will reject the firmware update.</p> <p>Your zappi will revert to the last known version of firmware, which was known to be safe.</p> <p><u>What this means for you:</u> Software controls how your zappi behaves. It is therefore important that it's protected, as cyber criminals could try to modify or use their own software to change how your zappi works. By only allowing software updates via our secure connection, the zappi has a way of knowing that the software came from myenergi.</p>
<p>Software</p> <p>The charge point is configured such that:</p> <ul style="list-style-type: none"> • It checks for security updates available when first set up by the owner and periodically after • It verified the authenticity and integrity of each prospective software update by reference to both the data's origin and its contents and only applies the update if the authenticity and integrity of the software have been validated • By default, it provides notifications to the owner about prospective software updates • The owner can implement software updates without undue difficulty 	<p>On first use, your zappi will enter a setup wizard. This wizard will require the Owner or the Installer of the zappi to:</p> <ul style="list-style-type: none"> • Connect the zappi to the Internet by WI-FI or Ethernet • Check if new software is available • If new software is available, zappi will automatically download and install new updates before the zappi can be used. <p>It is strongly recommended that you connect your zappi to the internet, on first setup, to get the latest software. Whilst this step is skippable (for homes that may not have an internet connection at the point of installation), this may mean that your zappi does not comply with the new law on smart EV charge points.</p> <p>Please ensure that the software on the zappi is at least the version mentioned at the top of this technical file.</p> <p>Where a connection to the internet or firmware update was skipped, zappi will log that it has not checked for software updates since leaving the factory and will re-attempt to do this when an internet connection is detected.</p>

	<p>During use, your zappi will check for updates once a day. If a new software version is available, zappi will automatically download the new firmware without your interaction.</p> <p>If you would like to check for an update sooner, you can do so on zappi, by selecting Download software and Check for Updates, from the menu.</p> <p>Once this software is ready for installation, you will receive an update notification in the myenergi app. This notification will only appear when your zappi is inactive. An inactive state means:</p> <ul style="list-style-type: none">• No vehicle is charging or is connected to the zappi. <p>The updates are simple to install, from the pop-up in the app, by pressing 'Install.'</p> <p>For your convenience, you can skip the update once every 24 hours, for a maximum of 3 times for each update. On the 4th occasion you'll be required to install the update, before continuing use of the app.</p> <p>If you prefer not to use the myenergi app, you can also update zappi and force the charge point to check for software updates in the menu.</p> <p>Updates are installed securely, by checking the origin, authenticity, and validity of prospective updates, in accordance with the details mentioned in the previous section of this technical file.</p> <p><u>What this means for you:</u></p> <p>As security doesn't stand still, cyber criminals are finding new ways to attack systems all the time. Therefore, it's important that we can update your zappi to protect you against new attacks. It's important your software stays up to date, so when you first turn on your zappi, zappi will check to see if any new software is available. (After all, it could have been on a shelf for a period of time before reaching your home). This ensures you have the latest software from the very first use of your zappi.</p> <p>During the life of your zappi, we'll update our software to make sure it's reliable, safe, and secure. zappi will check for new updates on its own, at least once a week.</p>
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	<p>Once an update is downloaded, we'll let you know in the app that it's ready to install.</p>  <p>We'll only do this during times when you're not using your zappi, so that you don't get reminded about software updates at times when it isn't convenient. All you have to do is press install and we'll do the rest. zappi will check that the software came from myenergi, has not been altered and is safe to install before continuing.</p> <p>You can expect important security updates for at least 5 years from the date of purchase, where technically feasible.</p>
<p>Software</p> <p>The charge point is configured such that:</p> <ul style="list-style-type: none"> • It verifies via secure boot mechanisms that its software has not been altered other than in accordance with a validated software update • If unauthorised change to software is detected, it notifies the owner and does not connect to a communications network other than for purposes of this notification 	<p>Each time your zappi reboots it will check the authenticity and integrity of its software. zappi will check the software has not been altered or corrupted, in anyway.</p> <p>Should such tampering be detected, zappi will abort the boot process and, where possible, a message is displayed on the zappi screen, informing the owner of invalid software.</p> <p><u>What this means for you:</u></p> <p>Whilst software could be sent to your zappi, over an internet connection, a cybercriminal could also attempt to do this by physically connecting to your zappi's hardware and altering the software already installed.</p> <p>We've introduced mechanisms to protect against such an attack. zappi will check its existing software each time it boots. If it detects the software has been altered, zappi will abort the boot process and enter a state to protect the end user.</p>
<p>Sensitive security parameters</p> <p>The charge point is configured such that:</p>	<p>Your zappi uses cryptographic keys to encrypt data, which are unique to your zappi. These keys are stored in a protected area which is resistant to tampering.</p>

<ul style="list-style-type: none"> • Security credentials stored on the charge point are protected using robust security measures • Software does not use hard-coded security credentials 	<p>Your zappi (depending on date of manufacture):</p> <ul style="list-style-type: none"> • Has a key provided to it before it leaves the factory. • Gets a key after first boot using a secure, encrypted method. <p>Your zappi does not contain any hardcoded security credentials.</p> <p>It is imperative that an installer downloads the latest updates on commissioning, to ensure compliance with the smart charging regulations. Failure to do so may result in non-compliance with the regulations.</p> <p><u>What this means for you:</u></p> <p>Using the previous analogy, think about keys you already have in your life. You wouldn't use the same key for your car, home, or every home in the street for that matter! You also wouldn't leave your key in the front door, where it could be stolen or copied.</p> <p>myenergi use keys that are unique to your zappi; they don't work on any other zappi. We also don't use hard-coded security credentials – think of these like leaving your key in the front door, it would be easy for someone to steal and use. We keep sensitive security keys in protected areas of your zappi, which are resistant to being stolen.</p>
<p>Secure communication</p> <p>The charge point is configured such that communications it sends are encrypted</p>	<p>Your zappi communicates with myenergi servers using AES encryption (Advanced Encryption Standard). The following communications are encrypted:</p> <ul style="list-style-type: none"> • Communications between your zappi and myenergi servers over the internet. • Communications between your zappi and your own personal device (Such as your mobile, tablet or computer), across the WI-FI access point, during WI-FI setup, are protected using WPA2-PSK

	<ul style="list-style-type: none"> If you use the myenergi app or myaccount, the communication between app or webpage and the server is encrypted using transport layer security (TLS) via HTTPS. <p><u>What this means for you:</u></p> <p>Every time a zappi talks across a communications network (such as the internet) there is a risk this data could be intercepted by eavesdroppers. Sensitive information, such as your energy usage, could be exposed without appropriate protections. myenergi encrypts your data - this means we scramble your data into something that is unreadable to anyone who does not have the right key to decode it. Your data is therefore meaningless to anyone who tries to intercept it across the internet.</p>
<p>Data inputs</p> <p>The charge point is configured such that:</p> <ul style="list-style-type: none"> Data inputs are verified so that the type and format of the data is consistent with that expected for the function If such data cannot be verified, it is discarded or ignored by the charge point in a relevant manner 	<p>Your zappi will verify the type and pattern of data it is expecting to receive, this may include:</p> <ul style="list-style-type: none"> Checking the data is within a defined range Checking the pattern of the data is expected Checking that the data does not contain any escape, dangerous characters, or arbitrary code, that could result in unexpected behaviour <p>If your zappi detects an unexpected input, your zappi is designed to handle the input as an error and the software will safely discard of the input.</p> <p><u>What this means for you:</u></p> <p>Attackers might try to trick a program into behaving in an unintended way, by providing information the zappi wasn't expecting to handle. This could cause the software to behave in an unexpected manner, or crash. To protect against this, we validate the inputs your zappi receives.</p>
<p>Ease of use</p> <p>The charge point is configured to minimise the inputs required from the owner in connection with its set-up and operation</p>	<p>Your zappi comes with a built-in setup wizard. On first boot the zappi will guide you or the Installer through a series of questions to determine the correct configuration for the installation. The user will be asked to setup necessary features such as:</p>

	<ul style="list-style-type: none"> • Telling zappi the geographic location it’s been installed in (For the purpose of determining if the smart charge point regulations apply) • Connecting zappi to a WI-FI network • Defining if the zappi is the first myenergi device or addition to an existing myenergi ecosystem. • Performing a check for new firmware to ensure your zappi is up to date. <p>We have designed the wizard to include only necessary features for operation and compliance of the zappi.</p> <p><u>What this means for you:</u></p> <p>The first time you use zappi, we’ll ask you a series of questions to ensure your zappi is setup in compliance with the regulations, as quickly as possible. You can adjust more advance settings at a later stage. By default, all necessary security protections are enabled.</p>
<p>Ease of use</p> <p>The charge point is configured such that any personal data can be deleted from it by the owner without undue difficulty</p>	<p>You can remove your personal data from the zappi, regardless of whether zappi has a connection to the internet. This can be achieved by factory resetting your zappi, which will erase all charging history and PIN codes from the zappi, using the display and menu buttons on the zappi.</p> <p>To remove your data from our online systems, please login to your online account at https://myaccount.myenergi.com and delete your account.</p> <p><u>What this means for you:</u></p> <p>You are in control of your data, in accordance with our privacy policy: https://myenergi.com/terms-and-conditions/privacy-policy/ This policy sets out how we use your data, how we store it and how long we’ll retain it. If you choose to change your zappi in the future, or move home, you can securely delete your data from the zappi and our online services.</p>

<p>Protection against attack</p> <p>The charge point is designed and manufactured to provide an adequate level of protection against physical damage to the charge point</p>	<p>To protect against physical damage, your zappi has a IK10 rating. An IK rating is sometimes known as an ‘impact rating’ and defines the magnitude of the impact that your zappi is designed to withstand.</p>
<p>Protection against attack</p> <p>The charge point incorporates a tamper-protection boundary to protect the internal components of the charge point</p>	<p>This section only applies to zappi’s sold on or after 30th December 2022:</p> <p>Your zappi has a built-in tamper detection device, which monitors for attempted or successful breaches of the tamper protection boundary.</p> <p><u>What this means for you:</u></p> <p>Once zappi has been installed there should be no reason to open the case. If someone wanted to tamper with your zappi they would need to get inside, that's why we have fitted a tamper detection device. If the case is opened, zappi will detect this and record this in the security logs.</p>
<p>Protection against attack</p> <p>The charge point is designed and manufactured to provide an adequate level of protection to its user interfaces and against use or attempted use of the charge point other than through the user interface</p>	<p>Your charge point has been designed so that it is resistant to physical and cyber-attacks. Your zappi has been designed to:</p> <ol style="list-style-type: none"> 1. Protect against physical intrusion 2. Protect against cyber-attacks on the user interfaces (including the myenergi app and associated programming interfaces, such as an API)
<p>Protection against attack</p> <p>The charge point is configured such that:</p> <ul style="list-style-type: none"> • If there is an attempt to breach the tamper-protection boundary, the owner is notified • Its software runs with only the minimum level of access privileges required to deliver functionality • Any logical or network interfaces that are not required for the normal operation of the charge point or otherwise comply with the Regulations are disabled 	<p>During the production of your zappi we disable any hardware interfaces which are not required for the operation of your charge point. (Such as development interfaces)</p> <p>The firmware on your zappi does not use admin privileges and your zappi 's firmware only has the necessary permissions required for operation of your zappi.</p> <p>The below section only applies to zappi’s sold on or after 30th December 2022:</p> <p>If the tamper detection device detects that the case has been opened, zappi will:</p>

<ul style="list-style-type: none"> • Software services are not available to the owner unless necessary for the relevant charge point to operate • Any hardware interfaces that are used for the purposes of testing or development, but not otherwise during the operation of the charge point are not exposed 	<ul style="list-style-type: none"> • Log a tamper event in its security log • Trigger a tamper event to the myenergi servers <p>Tamper events are accessible through the zappi menu, by navigating to Other Settings > Installer Settings > System, then select Tamper Detection, where zappi will display the date and time for each event.</p> <p>Users are also notified of a tamper event via the Event Log menu; where if a tamper event occurs, a black box is displayed around the time this occurred.</p> 
<p>Security log</p> <p>The charge point incorporates a security log – an electronic record which includes attempts (whether or not successful) to:</p> <ul style="list-style-type: none"> • Breach the tamper-protection boundary • Tamper with the relevant charge point • Gain unauthorised access to the charge point <p>These entries must record the time and date the event occurred (by reference to Coordinated Universal Time).</p>	<p>A security log can be accessed on the zappi, by going to security log in the zappi menu. This contains the last 256 security related events that have occurred on the zappi. The following events are stored:</p> <ul style="list-style-type: none"> • Attempted or successful breaches of the tamper protection boundary (Where fitted) <p>The information is stored in local time, with reference to Coordinated Universal Time (UTC). For your security, this log cannot be erased.</p>

Provision of information (Appendix)

As part of schedule 1 of the smart charging regulations we are obliged to provide the following information. You can find this information online by clicking on the following links:

Product Support Policy: [Product Support Policy | myenergi UK](#)

Vulnerability Disclosure Policy: [Vulnerability Disclosure Policy | myenergi UK](#)

Advice for operating your zappi securely: [Cyber Security Guidance - myenergi](#)