

# zappi

EV CHARGER

## Charge your EV with your PV.

We designed zappi to maximise your self-generated energy and lower your energy bills.

zappi features three modes; FAST, ECO and ECO+. Using either ECO or ECO+, the charging current is automatically and continually adjusted in response to on-site generation and household power consumption. In FAST charge mode, zappi operates like an ordinary EV charging station.



## Features

### myenergi Ecosystem

Integrate with your myenergi devices, prioritising surplus generation to power your home, zappi, eddi or, store in libbi.

### Charging Modes: ECO, ECO+ and FAST

### Integral Cable Holster (Tethered Version)

### Charge Scheduling

### Ultimate Control

Choose whether you want to charge your vehicle from solar, grid or, a mixture of both.

### Ethernet Port and Built-in WiFi

For connecting to the internet.

### Display Backlight

### Charge & Event Logging

### Remote Access

myenergi app allows you to access and control your zappi from anywhere in the world.

### Supplied with Clip-on Grid Sensor(s)

### Works Alongside Battery Storage System

### Automatic Firmware Checking

## Model Variants

### Tethered



Model No.	Rating	Colour
ZAPPI-2H22TW-G	7kW (Single-Phase) or 22kW (Three-Phase)	White
ZAPPI-2H22TB-G	7kW (Single-Phase) or 22kW (Three-Phase)	Black
ZAPPI-2H22TW-T	7kW (Single-Phase) or 22kW (Three-Phase)	White
ZAPPI-2H22TB-T	7kW (Single-Phase) or 22kW (Three-Phase)	Black

### Untethered



Model No.	Rating	Colour
ZAPPI-2H22UW-G	7kW (Single-Phase) or 22kW (Three-Phase)	White
ZAPPI-2H22UB-G	7kW (Single-Phase) or 22kW (Three-Phase)	Black
ZAPPI-2H22UW-T	7kW (Single-Phase) or 22kW (Three-Phase)	White
ZAPPI-2H22UB-T	7kW (Single-Phase) or 22kW (Three-Phase)	Black

## Charging Modes

ECO	ECO charge mode charges from a mixture of both excess self-generated energy and energy imported from the grid. ECO mode ensures a continuous charge by taking a minimum level of power from the grid (upto 1.4kW) should excess self-generated power fall short of this minimum.
ECO+	ECO+ charging ensures that all the charge delivered to the vehicle is from excess self-generation that would otherwise be exported. Charging will pause if excess generation falls below the minimum vehicle input and will continue only when there is sufficient surplus power available.
FAST	The vehicle will be charged at the maximum available rate regardless of source; this power can come from self-generation or simply from the grid. If there isn't solar panels or wind generation, in this mode zappi will charge just like an ordinary charging station

## Performance

Mounting Location:	Indoor or Outdoor (Permanent Mounting)
Charging:	Mode 3
Display:	Graphical Backlit LCD
Front Bolt Logo:	LED Multicolour (According to charge status and current)
Charging Current:	6A to 32A (Variable)
Dynamic Load Balancing:	Optional setting to limit current drawn from the unit supply or the grid
Connector Type:	Type 2 tethered cable (6.5m) or type 2 socket with locking system
Charging Profile:	3 Charging Modes; ECO, ECO+ and, FAST
Metering Accuracy:	Load and External CTs, Designed to meet Class B (1%) of EN 50470 Load: 0.25A-5(32)A External CTs: 0.25A-5(100)A
eSense:	In addition to the wide voltage range shown below the eSense input can also work with a volt free contact range: 3.3-230Vrms. Volt free contact (24V DC, supplied from the zappi)

## Electrical Specification

Rated Power:	7kW (Single-Phase) or 22kW (3-Phase)
Rated Supply Voltage:	230V AC Single Phase or 400V AC Three Phase (+/- 10%)
Supply Frequency:	50Hz
Rated Current:	32A max
Standby Power Consumption:	3W
Integral Protection:	6mA DC Residual current protection. RDC-DD tripping characteristics in accordance with EN 62955
Wireless Interface:	868/915MHz (Proprietary Protocol) for wireless sensor and remote monitoring options
WiFi Connectivity:	2.4GHz 802.11BGN Connection up to 150 Mbps
Communication Protocol:	OCPP 1.6J (Via Cloud) For Information on OCPP Supported Messages see; <a href="https://support.myenergi.com/hc/en-gb/articles/16907254510865">https://support.myenergi.com/hc/en-gb/articles/16907254510865</a>
Grid Current Sensor:	100A max. Primary current, 16mm max. Overall cable diameter
Current Transformer Limitations <i>Applicable when wired into a single phase supply</i>	CT1: Bi-directional CT2: Uni-directional (typically used for generation or solar monitoring) CT3: Bi-directional (similar to CT1 for additional flexibility)
Supply Cable Entry:	Rear or Bottom

## Mechanical Specification

Enclosure Dimensions:	438 x 282 x 122mm
Protection Degree:	IP65 (Dust tight and protected against water jets)
Enclosure Material:	PC / ASA (Batch Dependent)
Operating Temperature:	-25°C to +40°C (Out of direct sunlight)
Impact Resistant:	IK10

## Compliance

**Models:** ZAPPI-2H22TW-G, ZAPPI-2H22TB-G, ZAPPI-2H22TW-T, ZAPPI-2H22TB-T, ZAPPI-2H22UW-G, ZAPPI-2H22UB-G, ZAPPI-2H22UW-T, ZAPPI-2H22UB-T

CE & UKCA Compliant; LVD, EMC, RED, ROHS) (EN IEC 61851-1\*, EN IEC 61851-21-2, EN 300220-1/2, EN300328, EN 301489-1/3/17)

GB Compliance (-G Variants); Compliant with UK Electric Vehicle (Smart Charge Points)

\*With the exception of clause 8.4 of BS IEC 61851-1:2019 which states that "For Modes 3 and 4 permanently connected EV supply equipment, protective earthing conductors shall not be switched." This clause conflicts with UK's IET Wiring Regulations (BS 7671:2018+A1:2020 Requirements for Electrical Installations.) which permits the switching of protective conductors under certain conditions. According to BSI guidance, users should follow the guidance given in BS 7671.