

# zappi



## Charge your EV with your PV

zappi has 3 charging modes which makes it great for all homeowners. Those with grid-tied microgeneration systems like wind or solar can use the eco setting to save on their energy bills. 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.



7kW Single Phase



22kW 3-Phase

EV charging from surplus solar or wind generation

Dynamic load balancing for maximum installation flexibility



Advanced integral safety features

### Zappi Features

≫ 3	Charging	Modes:	ECO,	ECO+	and	<b>FAST</b>
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Optimises Microgeneration Self-consumption

Works with Solar PV or Wind Turbine Systems

Economy Tariff Sense Input

Programmable Timer Function

Charge & Event Logging

Pin-code Lock Function

OZEV (Home/Work Scheme) Approved

Ethernet Port and built-in WiFi for Connecting to the Internet

Tap Operated Display Backlight

Integral Cable Holster (Tethered Version)

Remote Control & Monitoring

Supplied with Clip-on Grid Sensor(s)

Works Alongside Battery Storage System

Future Proof Installation

→ 3 Year Warranty

Complies with CE and UKCA Requirements

#### Charging Modes

#### ECO

Charge power is continuously adjusted in response to changes in generation or power consumption elsewhere in the home. Charging will continue until the vehicle is fully charged, even if power is drawn from the grid.

#### ECO+

Charge power is continuously adjusted in response to changes in generation or power consumption elsewhere in the home. Charging will pause if there is too much imported power, continuing only when there is surplus free power available.

#### **FAST**

In this mode, the vehicle will be charged at maximum power. This is just like an ordinary Mode 3 charging point.

#### **Model Variations**

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	Untethered	White
ZAPPI-2H22TW	22kW	Tethered	White
ZAPPI-2H22UB	22kW	Untethered	Black
ZAPPI-2H22TB	22kW	Tethered	Black



#### Performance

Mounting Location Indoor or Outdoor (Permanent Mounting)

Charging Mode 3 (IEC 61851-1 Compliant Communication Protocol

Display Graphical Backlit LCD

Front 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 range of voltages below the eSense input can also work with a

volt free contact.

Range 3.3-230Vrms

Volt Free Contact (24Vdc Supplied from the zαρρί)

Compliance LVD2014/35/EU, EMC 2014/30/EU, EN 61851-1:2019\*, EN 62196-2:2017, ROHS

2011/65/EU, CE Certified 2014/53/EU (RED), 2011/65/EU (RoHS), 2014/30/EU

(EMC), 2014/35/EU (LVD).

\*Complies fully with the requirements of EN61851-1:2019 with the exception of Clause 8.4 in order to meet the requirements of BS7671:2018 Amendment 1:2020. BS7671:2018 requires the protective earth conductor be switched in order to provide protection against a damaged PEN conductor in a TN-C-S earthed system.

#### **Electrical Specification**

Rated Power 7kW (Single 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

Integral Protection 6mA DC residual current protection (RDC-DD in accordance with EN

62955)

**Economy Tariff Sense** Input 3.3 – 230Vrms AC Sensing (4.0kV Isolated)

Volt Free Contact (24Vdc Supplied from the zappi)

Wireless Interface 868/915 MHz (Proprietary Protocol) for Wireless Sensor and Remote Monitoring

Options

WiFi Connectivity 2.4GHz 802.11BGN Connection up to 150 Mbps

Grid Current Sensor 100A max. Primary Current, 16mm max, Cable Diameter

Cable Entry Rear, Bottom or Side

#### Mechanical Specification

Enclosure Dimensions 439 x 282 x 122mm

Protection Degree IP65 (Weatherproof)

Enclosure Material PC/ASA (Batch dependent)

Operating Temperature -25 °C to +40 °C

Impact Resistant IK10

#### Installation Requirements

Circuit Breaker 32A Curve B

Earthing Arrangement TN: Can be Connected to the PME Supply. Complies with BS7671:2018-amd1:2020

722.411.4.1 (v)

TT: Earth Resistance < 200  $\Omega$  according to BS 7671:2018 or <100  $\Omega$  for some vehicles.

An additional upstream Type A RCD or RCBO is required