Charge Whiz

Electric Vehicle Charging Station

The Solarnative ChargeWhiz is a smart 22 kW twin charging station for electric vehicles. As a part of the Solarnative Smart Energy Home, it is designed for solar surplus charging and is at the same time prepared for bidirectional charging.

Key Features

Flexible power split
Dynamic power split between the two charging points
Dynamic distribution of total available power to multiple charging stations

Wireless communication
Robust and low-damping wireless LoRa communication with Solarnative IntelliGate
Remote control via Solarnative app

Photovoltaic surplus charging
Automatic 1-phase/3-phase switch and smart battery usage enables surplus charging from 1 W surplus

Smart scheduling
Fully-charged when leaving
Compatible with car preheat

Easy installation
No data cables
Plug & Play over-the-air commissioning
Mains cable from top or bottom

Configuration

The Solarnative ChargeWhiz is available with one or two charging cables with configurable length. The total power can be configured to 11 or 22 kW. Each charging point can be configured dynamically using the Solarnative app.

The ChargeWhiz is designed for smart usage within the Solarnative Smart Energy Home. It is designed to make maximum use of the solar energy, while making sure the car is fully charged when needed.

For commissioning and control of the ChargeWhiz with the Solarnative app, the system requires a Solarnative IntelliGate. For surplus charging, a Solarnative PowerMeter is required.

Technical Data

Connections	ChargeWhiz
Power supply	3-phase 32 A
Mains AC connection	5 x 6-10 mm² cable clamp (tool-free), standard installation cable
Max. current	32 A or 16 A per phase (configurable)
Nominal voltage	230 V @ 50 Hz / 240 V @ 60 Hz
Nominal frequency	50-60 Hz
Overcurrent protection	Requires max. 32 A
Internal DC residual current detection (RDC-MD >6 mA)	RCD switch type B included (only additional RCD switch type A required in electrical cabinet)
Mounting	Wall-mounting indoor or outdoor
Mains cable connection	From top or bottom

System	ChargeWhiz
Number of charging points	2 (if required, 1 can be used solely)
Charging cable	Configurable with 1 or 2 cables with 5 m or 7.5 m length
Charging Plug	Type 2
Standby consumption	< 1 W

Charge Modes	ChargeWhiz
Charge mode	Mode 3 in accordance with IEC 61851-1 AC charging
Power split	The available charging power can be distributed flexibly between the two charging points
PV surplus charging	Automatically switches to 1-phase charging for available surplus power < 4.14 kW to allow surplus charging down to 1.38 kW In combination with a Solarnative battery system: smart surplus charging from 1 W surplus power
Smart scheduling	Combination of surplus charging with smart scheduling to have solar-optimized charging and a fully charged car when needed
Fleet management	Total available connection power can be distributed over multiple ChargeWhiz EV chargers
Bidirectional charging	The ChargeWhiz is prepared for bidirectional charging according to ISO-15118(-20)

Communication	ChargeWhiz
Communication with SGW 1 gateway	LoRa WAN wireless
Commissioning	Via Solarnative app

General Data	ChargeWhiz
Dimensions (length x width x height)	80 mm x 80 mm x 300 mm (3.2 in x 3.2 in x 11.8 in)
Weight	2 kg (4.4 lbs) (without cables)
Ingress protection	IP65

Compliance	ChargeWhiz
Certifications (pending)	IEC 61851-1, ISO-15118(-20)