ev tap<sup>®</sup>\_

# EVTAP<sup>®</sup> SMART WALLBOX 11/22 KW

#### DATA SHEET

#### **EVtap®** Features

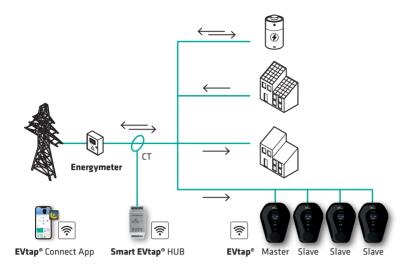
- 3 Charging Modes: Solar Only, Solar Assist & Full Power
- Surplus charging enables self-consumption optimization\*
- Dynamic Load Management \*
- EV fleet and business solution with Master & Slave load balancing topology
- OCPP 1.6 (can be integrated with OCPP based backends)
- Big 2.8inch LCD Display
- Built in RCD protection
- Easy controlling with Android and IOS app
- RFID

\* Smart EVTap® Hub required



2023/2024

# PV self-consumption optimization through the integration of smart wall boxes from EVtap®



### **3 Intelligent Charging Modes**

#### 01 Full Power

In this mode the EV will be charged at maximum power. This power can come from PV, simply from the grid or a combination of both.

#### 02 Solar Assist

This mode minimizes the use of grid power. The charging from grid power would be capped at 6A. The charging power would only increase if surplus energy from PV is available.

#### 03 Solar Only

This is the greenest charging mode and would only use the surplus PV power. No grid power is used and the charging goes in suspended mode if not enough surplus PV power is available.

Photovoltaic excess charging – charge electric vehicles efficiently with up to

Charge multiple vehicles using at one location using Dynamic Load Management

Dynamic load management system of the EVtap Wallbox

Smart series ensures that the available charging power is optimally distributed to all electric vehicles to be charged. This not only saves you the high investment costs for expanding your grid connection, but also prevents peak loads. This is possible in connection with

Since the electricity prices continue to rise and the feed-in tariffs for photovoltaic systems are falling at the same time, it makes more and more sense to charge the electric vehicle with solar power from your own solar system using a smart Wallbox. This is possible in connection with the

100% solar energy

EVtap HUB.

the EVtap HUB.

## EVtap® Wallbox 11/22 kW - Technical specifications

Performance specifications	
Input	1-/3-phase
Nominal voltage	400V AC
Rated current	16A (11kW) / 32A (22kW)
Frequency	50/60 Hz
Output voltage	400V AC
Maximum current	16A (11kW) / 32A (22kW)
Nomial power	22kW (can be throttled)
Standby power consumption	2W
Protocol	Mode 3
Product number	753842
Body material	PC
Body colour	Black
Lifetime	Switching frequency > 10.000
Weight	5kg
Dimensions (mm)	380 x 288 x 41
Mounting method	Wall mounting / on a mounting stand
Guarantee	2 years
Operating temperature	-35°C to +50°C
Air humidity	5% to 95% (non-condensing)
Certificates	CE, RoHS

Safety	
Residual current operated device / RCD	30mA AC & 6mA DC
Electrical protection	Overcurrent protection, ligthning protection, over/ under voltage protection, over/under temperature protection, residual current protection
Protection type	IP55
Shock resistance level	IK10
Theft protection	With safety screw
Communication	
Wi-Fi	Yes, 2,4 GHz
LAN	Yes, RJ-45
OCPP	OCPP 1.6J
App connection	Yes, with EVtap Connect App (iOS and Android)
Web portal connection	Yes
Software update	Yes (web, App, USB)
Interface	
Charging port	Type 2 according IEC 62196-2
Screen	2,8" LCD display
Indicator	RGB LED-strips
Access protection	RFID (ISO/IEC 14443A/B)
Multifunctional button	Configurable (e.g., loading, turning screen on/off)
Accessories	EVtap Hub   CT 3 phase 100 A   CT 3 phase 800 A
Charging Cable	3m, 5m and 7m







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# **PV SELF-CONSUMPTION OPTIMIZATION** Integration of smart wall boxes from EVtap®

EVtap<sup>®</sup> wallboxes can charge electric vehicles with up to 100% solar power while optimizing self-consumption. In addition, EVtap<sup>®</sup> dynamically adjusts its charging power to the grid connection limits and the total power consumption of the devices - all thanks to the EVtap<sup>®</sup> Load Management Hub.

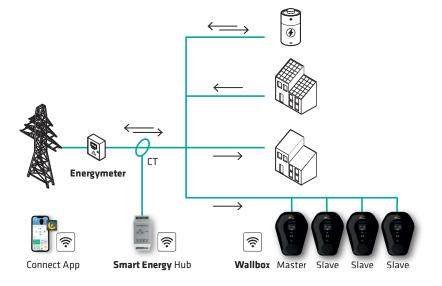
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... PV Surplus Loading

EVtap® Smart Energy Hub is used with the supplied current transformer clamps to measure current consumption and flow direction in real time. It tells the charging station the maximum current that should be made available for charging electric vehicles. The EVtap® Smart Energy Hub creates its own Wi-Fi access point, allowing for easy local configuration using a smartphone, tablet or PC. Compatible with EVtap® Smart Wallbox charging stations. RS485 connection also available.

With the Master & Slave mode, the flexible installation of additional charging points without investing in expanding the grid connection is a great option for companies and company fleets.



### **EVtap° Smart Products**



#### Advantages in combination with Smart Energy Hub:

- Solar PV optimal use for cost-effective & environmentally friendly EV charging.
- Works with all PV systems (regardless of manufacturer)
- Dynamic load management of up to 252 EVtap<sup>®</sup> wall boxes
- Mains connection is never overloaded
- Expensive power peaks are avoided
- Master and slave mode for EV fleets and small businesses
- 3 intelligent charging modes: 1. Full Power 2. Solar Assist 3. Solar Only
- User-friendly Android and IOS app with intelligent and energy management functions
- OCPP 1.6 and OCPP 2.0.1 interface for remote monitoring