wallbox ™

# Supernova

Fast charging you can rely on

SUPERNOVA
# Fast charging you can rely on

Supernova is a full fast-charging solution designed under four key principles that make it profitable, easy to operate and scalable.

## Reliability
Maximizing uptime to increase revenue and customer satisfaction while reducing maintenance costs. From our product design focused on reliability and serviceability to the use of real-time data to optimize maintenance and management.

## Efficiency
Deliver more power with optimal resource utilization. Supernova requires up to half the total investment compared to similar chargers, is a leader in terms of energy efficiency and ensures easy installation and operation.

## User centricity
Thanks to our end-user understanding, gained through years of delivering home charging solutions, we provide the best possible fast charging experience. A seamless experience attracts more drivers, increases turnover and reduces customer callbacks.

## Flexibility
Supernova integrates into any existing charging network and provides a future-proof solution, offering simple alternatives to increase its power as well as compatibility with today's and tomorrow's electric vehicles.

# Designed for maximum uptime and reduced maintenance

Our experience and dedication to electric vehicle charging allows us to insource R&D, industrialization and production, which occurs just 5 minutes from our European headquarters. This gives Wallbox unprecedented control over the entire value chain to **ensure the highest quality of all components as well as a seamless integration between hardware and software.**

Based on our patented Quasar technology, it includes **six independent power modules** to ensure uptime even in the unlikely case of a module failure.

**PowerFlow** is our self-learning algorithm that allocates power per module when EVs demand less than nominal power. This results in a homogenous demand per module, **reducing wear and increasing lifetime.**

# And with greater serviceability and connectivity

✔ Real-time data simplifies maintenance with **remote diagnosis and service.**

✔ **Predictive approach,** thanks to a wide range of sensors that detect and correct small faults before they cause a failure.

✔ Detailed diagnostic codes with an appropriate action plan to **make service simple and efficient.**

## EFFICIENCY
# Deliver more power with optimal resource utilization

## Product

Up to **half the total investment** than similar competitors.

Our patented Quasar technology is compact and affordable and makes Supernova a leader with 97% energy efficiency, **reducing operational costs.**

**PowerFlow** is our self-learning algorithm that enhances our innovative six-module approach. It allocates power per module to **optimize energy efficiency** even when EVs demand less than nominal power.

## Transport & Installation

**Light and modular design for easier and effortless transportation and installation.**

**Simplified installation options** include forklift capability, eliminating the need for a crane. Our comprehensive training program simplifies the process for all partners and installers.

**Customized software configurations** can be performed in the production line, with a final and simple web interface process on site (no specific software needed).

## Maintenance

**Efficient, low-cost maintenance** is achieved thanks to Supernova's comprehensive design, a wide array of sensors, real-time data and round-the-clock connectivity:

✔ All major components and modules are lightweight and easy to maintain or replace, with convenient access from three sides

✔ Remote diagnostics and repairs

✔ Preventive and corrective maintenance adapted to real operating conditions

# Provide a seamless experience to customers

**Interactive light system** to guide drivers through the entire process, from finding a free spot to returning the plug to its holster.

**10" color touchscreen** with intuitive design, concise information and minimum interactions required to initiate charging.

All handled elements are **ergonomically accessible and wheelchair compliant**. Our retractable cable management system* prevents floor contact and ensures that the installation remains clean.

**Numerous payment options.** Screen QR Code and credit card reader* with worldwide acceptance. The 3-in-1 credit card reader supports contactless (including apple/google pay), chip and magnetic.

Authentication options: RFID or via OCPP interface

Provides a faster charge with our innovative power extension that connects two chargers **to deliver up to 120 kW.**

*Optional feature*

# Adapt to current and future needs

CCS & CHAdeMO charging cables. A future hardware and software update will allow simultaneous charging of 2 EVs with dynamic power management.

Easy **integration** with any **existing charging network** through OCPP.

**Over-the-air software** updates ensure up-to-date functionality and compatibility with current and future electric vehicles.

Adapts to varying demand with minimal additional investment in multiple charger locations by pairing two 60 kW-units to deliver up to 120 kW to 1 EV. This **increases customer rotation and utilization rate.**

Compatible with a future upgrade to **130 kW** with an on-site hardware retrofit and software update.

# Simple solutions to increase power as demand grows

## Supernova

**Current solution delivers 60 kW** via six independent power modules
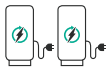
*2021*



## Power Extension

Two 60 kW-units connected via DC link **Up to 120 kW** to one EV

*1st half 2022*



## Power Upgrade

Compatible with a future upgrade to **130 kW** with an on-site hardware retrofit and software update.

*2nd half 2022*

## SUPERNOVA
# Technical specifications

| | |
|---|---|
| **DC Connectors:** | CCS2, CHAdeMO |
| **Charging Protocol:** | ISO15118 (including Plug&Charge*) / CHAdeMO |
| **Cable Length:** | 3m, 5m[1] |
| **Cable Management:** | Auto retractable system [1] |
| **Output Power:** | 60 kW |
| **Nominal Efficiency:** | Up to 97% |
| **Power Factor:** | > 0.98 |
| **THD:** | 5% |
| **Output Voltage:** | 150-500V |
| **Output Current:** | 150A |
| **Supply Input:** | 400V ± 10%, 91A, 50Hz |
| **Electrical Protections:** | Grid disconnection, MCB, Surge Arrestor |
| **Environmental Ratings:** | IP54, IK10, 2000 m altitude |
| **Operating Temperature:** | -35ºC to 50ºC |
| **Cooling System:** | Active air cooling |
| **Operational noise level:** | < 55dBA |
| **Humidity:** | 5% to 95% Non-condensing |
| **Dimensions:** | 2000 x 714x 453 mm |
| **Weight:** | 250kg |

2000 mm

714 mm

453 mm

868 mm

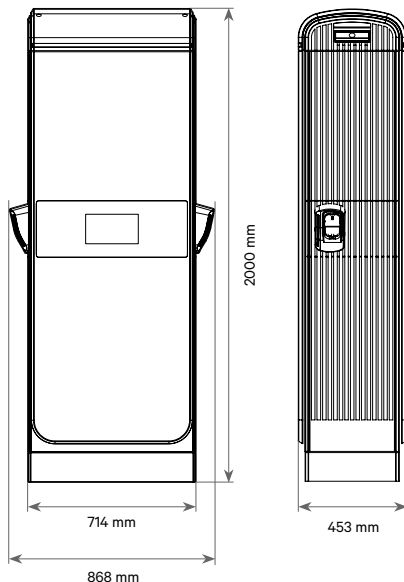| | |
|---|---|
| **Branding Options:** | Artwork Templates |
| **Connectivity:** | Ethernet, 2G/3G/4G/LTE, Space for external router (DIN rail) |
| **Backend Communication:** | OCPP 1.6J |
| **Diagnostics:** | Auto-diagnostics system |
| **User Interface:** | 10" Anti-vandal Colour Touch Display (sunlight readable), LED status lights |
| **Authentication:** | App (OCPP) / RFID (MI-FARE ISO/IEC14443A/B, ISO/IEC15693, ISO/IEC18000-3, FeliCa, NFC) |
| **Ad-Hoc Payment:** | Credit Card Reader* [1]: 3-in-1 contactless, chip, magnetic, Screen QR code |
| **Metering:** | AC MID [1], DC Eichrecht (German calibration law)* [1] |
| **Charging Compliance:** | CCS (DIN 70121, ISO15118), IEC 61851-1, IEC 61851-23, IEC 61851-21-2, CHAdeMO 1.2 Certified |
| **Safety & EMC Compliance:** | CE, IEC |
| **Cybersecurity Compliance:** | LINCE* |

Specifications are subject to change to improve design, function, or otherwise. [1] Optional. (*) To be launched in 2022.

## Want to learn more about Supernova?

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## www.wallbox.com

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