

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

Easy operation and reduced total cost of ownership. 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, can be installed in all kinds of locations and is compatible with today's and tomorrow's electric vehicles.



## RELIABILITY

# Designed for maximum uptime and reduced maintenance

Our experience and dedication to EV charging allows us to insource R&D, validation, industrialization and production, which occurs just 5 minutes from our European headquarters. Furthermore, **we manufacture our own power modules**, gaining unprecedented control over the entire value chain to **ensure the highest quality of all components and a seamless integration between hardware and software.**

Based on our patented Quasar technology, its modular architecture with parallel power conversion ensures uptime even in the unlikely event that a module fails.

Our self-learning algorithm allocates power per module when EVs demand less than nominal power. Its cycling capability allows to switch modules off, **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

# Easy operation and reduced total cost of ownership

## Product

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

State-of-the-art Silicon Carbide Power Semiconductors (SiC) resulting in lightweight modules (11 kg), higher efficiency (95,4%) and reduced audible noise.

Our self-learning algorithm enhances our innovative six-module approach. Its cycling capability allows to switch modules off in order to **optimize energy efficiency** even when EVs demand less than nominal power.

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## 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).

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## 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 diagnosis and troubleshooting to reduce onsite intervention
- ✓ Preventive and corrective maintenance adapted to real operating conditions

## USER CENTRICITY

# 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. **Courtesy lights** simplify charging in dark places or during the night.

**10" sunlight readable 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\*.

Authentication options: RFID or via OCPP interface.



*\*Optional. Contact your sales representative regarding availability.*

## FLEXIBILITY

# Adapt to current and future needs

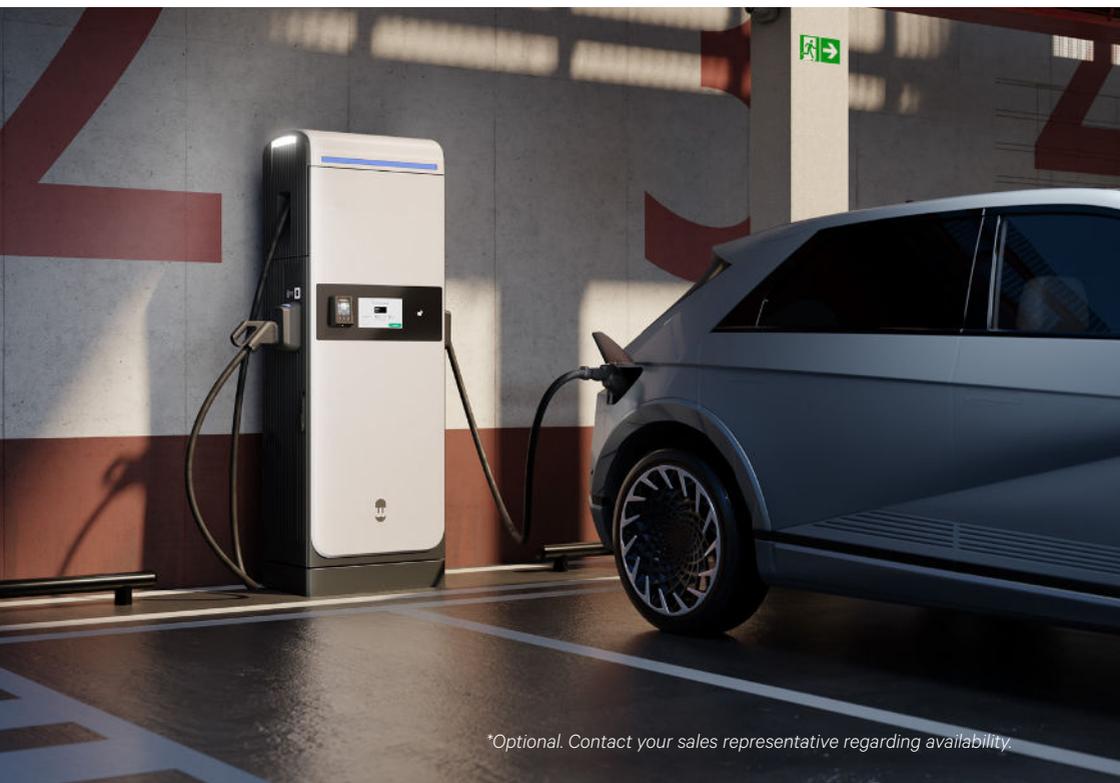
CCS2 & CHAdeMO or double CCS2\*.

Split charge\* delivers 30 kW per outlet when two EVs are connected. This **increases utilization** as simultaneous sessions can start. Power increases to 60 kW to one car when the second one unplugs.

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.

Supernova can be installed **against a back wall**. Considering also its slim design, it **adapts perfectly to locations with very limited space**. A minimum gap of 10 cm against the back wall is recommended to simplify service & repairs.



*\*Optional. Contact your sales representative regarding availability.*

## SUPERNOVA AT A GLANCE

# Reliable operation and maintenance

External antenna for **enhanced connectivity**



**Robust.** Corrosion free metal structure and full IK10 rating (including the screen)

**Easy service.** Power modules are lightweight and easy to replace in the cable-free rack system, demanding less than 90 sec

**Easy service.** Filters are easily accessible from both side doors

**Easy service.** Three access doors on the front & both sides with an open detection system and single lock. Provides high visibility and easy access

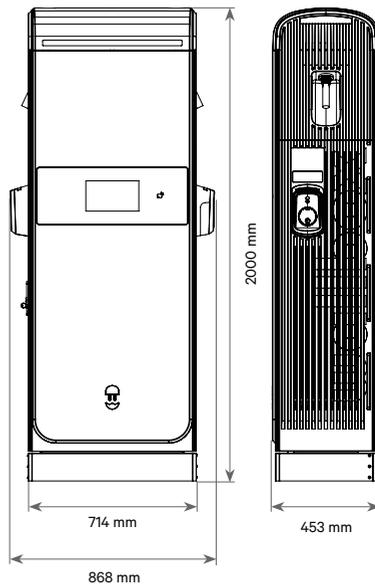
**Safe handling:** instant output power cut when any door is open

Bottom grooves for forklift to reduce **installation time and costs**

## SUPERNOVA

# Technical specifications

<b>DC Connectors:</b>	CCS2+CHAdeMO / CCS2+CCS2
<b>Charging Protocol:</b>	ISO15118, DIN SPEC 70121, CHAdeMO
<b>Cable Length:</b>	3m, 5m [1]*
<b>Cable Management:</b>	Auto retractable system [1]*
<b>Output Power:</b>	60 kW
<b>Nominal Efficiency:</b>	95,4%
<b>Power Factor:</b>	> 0.98
<b>THD:</b>	5%
<b>Output Voltage:</b>	150-500V
<b>Output Current:</b>	150A
<b>Supply Input:</b>	400V ± 10%, 91A, 50Hz
<b>Electrical Protections:</b>	Grid disconnection, MCB, Surge Arrestor
<b>Environmental Ratings:</b>	IP54, IK10, 2000 m altitude
<b>Operating Temperature:</b>	-35°C to 50°C
<b>Cooling System:</b>	Active air cooling
<b>Operational noise level:</b>	< 55dBA
<b>Humidity:</b>	5% to 95% Non-condensing
<b>Dimensions without holster:</b>	2000 x 714x 453 mm
<b>Weight:</b>	290kg
<b>Branding Options:</b>	Artwork Templates
<b>Connectivity:</b>	Ethernet, 2G/3G/4G/LTE, Space for external router (DIN rail)
<b>Backend Communication:</b>	OCPP 1.6J
<b>Diagnostics:</b>	Auto-diagnostics system
<b>User Interface:</b>	10" Anti-vandal Colour Touch Display (sunlight readable), LED status lights
<b>Authentication:</b>	App (OCPP) / RFID (MI-FARE ISO/IEC14443A/B, ISO/IEC15693, ISO/IEC18000-3, FeliCa, NFC)
<b>Ad-Hoc Payment:</b>	Credit Card Reader* [1] (Numerous payment options)
<b>Metering:</b>	AC MID [1]
<b>Charging Compliance:</b>	CCS (DIN 70121, ISO15118*), IEC 61851-1, IEC 61851-23, IEC 61851-21-2, CHAdeMO 1.2 Certified
<b>Safety &amp; EMC Compliance:</b>	CE, IEC
<b>Cybersecurity Compliance:</b>	LINCE*



Specifications are subject to change to improve design, function, or otherwise. [1] Optional. \*Contact your sales representative regarding availability.

**Want to learn more about Supernova?**

**Contact us:** sales@wallbox.com, +34 932 200 451

**www.wallbox.com**

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