EN⁺

BUSINESS SERIES WALLBOX

Innovativeness

- + Temper glass panel, modern design
- + Business use with intelligent App control
- + WiFi Mesh technique, saving cost on wire installation

Intelligent Control

- + Wireless communication (Wi-Fi/Bluetooth), Ethernet/4G optional
- + OCPP communication protocol with CMS
- + Intelligent operation by App and cashless payment

Secure and Safe

- + RCD Type A and 6mA DC residual current protection
- + MID certified energy meter with accurate measurement

Flexible Option

- + Universal Type 2 socket, optional with Type 1/Type 2 charging cable
- + App operation or RFID authentication or plug and play
- + Wall-mount or floor-stand installation





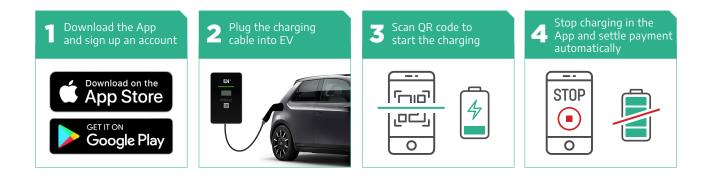








DATASHEET	MODEL	AC7000-BE-34	AC022K-BE-34		
Input	Power Supply	1P+N+PE	3P+N+PE		
	Rated Voltage	230V AC 400V AC			
	Rated Current	32A	32A		
	Frequency	50/60Hz	50/60Hz		
Output	Output Voltage	230V AC	400V AC		
	Maximum Current	32A	32A		
	Rated Power	7kW 22kW			
Jser Interface	Charge Connector	Type 2 socket			
	Enclosure	Plastic PC940 Galvanized steel			
	Front Panel	Temper glass			
	LED Indicator	Green/Yellow/Red			
	LCD Display	2.7" black & white screen			
	RFID Reader	Mifare ISO/IEC 14443 A			
	Start Mode	Plug&Play/RFID card/App			
	Emergency Stop	No			
Communication	Wi-Fi	Yes			
	Ethernet	Optional			
	3G/4G	Optional			
	OCPP	OCPP 1.6 Json (OCPP 2.0 optional)			
Safety	Energy Meter	MID certified			
	RCD	30mA Type A + 6mA DC			
	Ingress Protection	IP54			
	Impact Protection	IK08			
	Electrical Protection	Over current protection, Residual current protection, Short circuit protection, Ground protection, Surge protection, Over/Under voltage protection, Over/Under frequency protection, Over/Under temperature protection			
	Certification	CE			
	Certification Standard	EN/IEC 61851-1: 2017, EN/IEC 61851-21-2: 2018			
	Warranty	2 years			
Environment	Installation	Wall-mount/Pole-mount			
	Work Temperature	-30°-+50°			
	Work Humidity	5%-95%			
	Work Altitude	<2000m			
Package	Product Dimension	356 x 221 x 136mm (H*W*D)	452 x 295 x 148mm (H*W*D)		
2	Package Dimension	490 x 330 x 210mm (L*W*H)	560 x 380 x 210mm (L*W*H)		
	Net Weight	3.4kg 11kg			
	INEL VVEIUITL				
	Gross Weight	4.2kg	12kg		



CLOUD PLATFORM

Dedicated to enable the future of e-Mobility by providing the most open, secure and robust charging network everywhere, a charging platform based on the cloud server makes it simple and convenient to meet the diverse demands of charger operators, charging users and e-Mobility service providers. We provide everything you need to offer a complete EV charging solution.

Management System

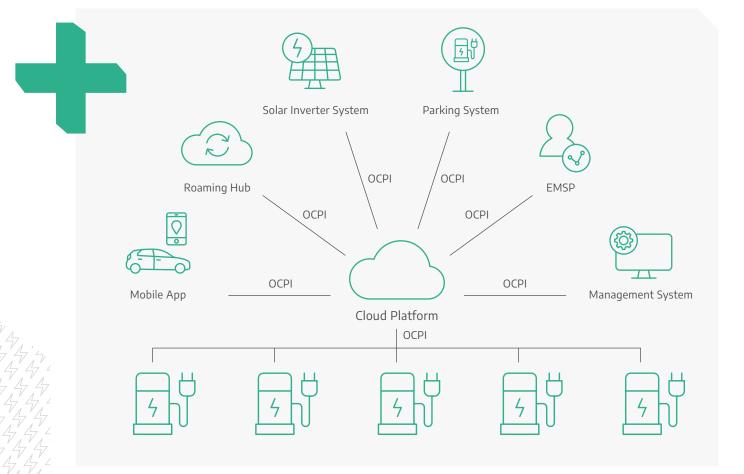
A central system for charger operators to manage charge points and monitor charging service. Status monitor, charge record, prices management, firmware upgrade, remote diagnose, and load balance are offered in one capable system.

Mobile App

A charging App for EV drivers who needs charging service. Prices, locations, availability, start/stop charging, and auto billing are available in an easy way.

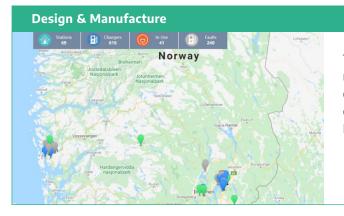
Interoperability

Connections with e-Mobility Service Providers who have EV drivers as customers are viable through the open charge point interface protocol (OCPI).



MANAGEMENT SYSTEM

The management system is designed for operators to manage the charge points and the charging service to all users. The future of charging is smart, and our management system is equipped with future-proof features. The system works on the cloud, which enables us to update new features rapidly.



The load balance feature enables you to limit the maximum charging power of chargers remotely, or set a maximum charging load for a group of chargers. It eliminates the risks of overloading and EVs can charge with possible maximum power.

Remote Management

At the management system, you can monitor your chargers, set prices, limit usage, and manage your stations remotely, for example remote upgrade and remote diagnose. Manage your charging stations with ease.

iew Charger Status + Charger Type + Icon +						Charger SN
Online Status	Charger SN	Charger Type	EN-GATE SN	Address	Phase	Action
0	SN1000519A120909	AC	SN92405185280003	16 - DJohnsen		420⊁७0
0	SN10E0518B160004	AC	SN92405185280003	19 - S. Haave	Three-Phase	00+00
0	SN10E0518B160003	AC	SN92405185280003	34 - Ly Pham	Three-Phase	00×00
0	SN10E0518B160002	AC	SN92405185280002	111 - L.Rambel	Three-Phase	△ ♂ ○ <i>⊁</i> ७ ○
0	SN10E0518B160001	AC	SN92405185280002	100 - K.Brekke	Three-Phase	ABO/00
0	SN10E05188290003	AC	SN92405185280001	44 -Rassel	Three-Phase	△ Z ● ⊁ ७ 0
0	SN10E05188290002	AC	SN92405185280002	108 - S.Gerhardsen	Three-Phase	00×000
0	SN 10E05185280012	AC	SN92405185280003	32 - J.Wagenius	Three-Phase	0 C 0 F 0 0
0	SN10E05185280011	AC	SN92405185280003	7 - P.Skaalgaard	Three-Phase	00×000
•	SN10E05185280010	AC	SN92405185280002	145 - J.Ødegaard	Three-Phase	a ≥ • ⊁ 0 0
0	SN10E05185280009	AC	SN92405185280001	50 - T.Holm	Three-Phase	0 0 × 0 0
0	SN10E05185280008	AC	SN92405185280003	26 - K.Fossum	Three-Phase	00×00
0	SN10E05185280007	AC	SN92405185280002	148 - D.Sæthre	Three-Phase	0 C 0 / 0 0
0	SN10E05185280006	AC	SN92405185280003	13 - E.Nottestad	Three-Phase	00×000
0	SN10E05185280005	AC	SN92405185280002	104 - Ø.Pettersen	Three-Phase	020/00

Payment & Billing



You can set the prices for charging in the management system, based either on the amount of electricity charged, the duration of charging events or both. The revenue from charging events is transferred to your bank account automatically.

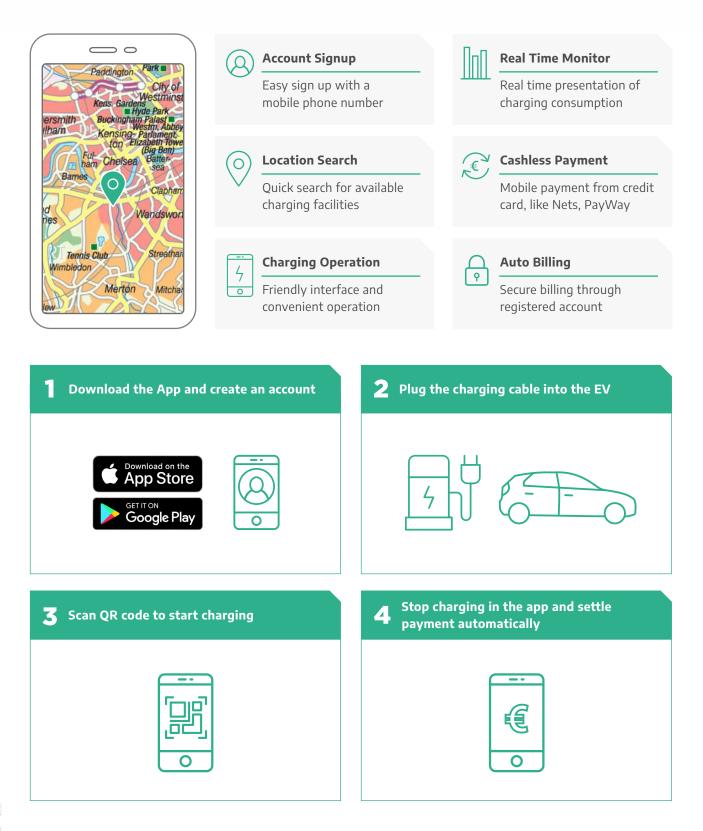
Statistics & Administration

Statistics on used kWh, duration of charging event, amount of payment etc. can all be viewed in the management system. If an issue can't be resolved, you can report it and allow our professionals to take care of it for you.



MOBILE APP

The charging App connects EV drivers with charging stations, so that they can easily find a charger and enjoy the charging service. It enables users to do location search, charging monitor and payment settlement. All is done in a mobile phone.

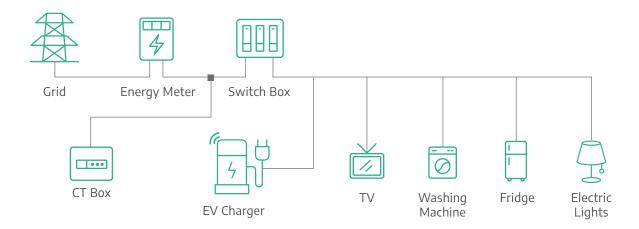


LOAD BALANCE SOLUTION

Dynamic Load Balance

Dynamic Load Balance is a smart charging feature which balances the distribution of the total available power between chargers and other loads within the building in real time. It not only protects appliances, but also ensures EVs are fully charged at the lowest cost.

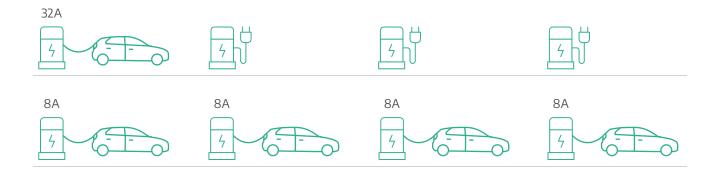
CT box monitors the total energy consumption and reports to the management system. The system controls the charging power of each individual charger automatically to avoid overloading when chargers and other loads are being used simultaneously.



Static Load Balance

Static Load Balance is a smart charging feature which balances the distribution of the total available power for multiple chargers at a specific location. It enables you to set a maximum power for multiple chargers in the management system and distribute the charging power evenly between the individual active chargers.

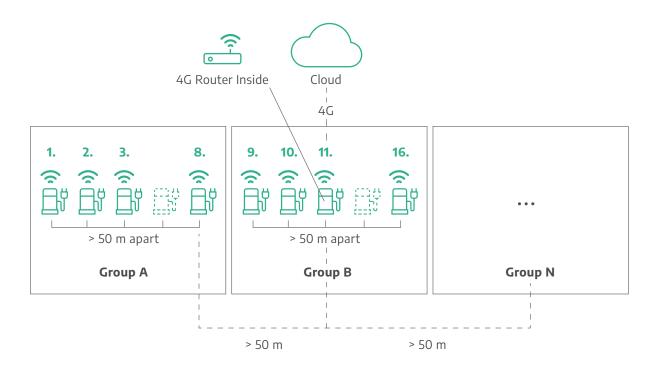
Load balance helps you to protect the local grid within the capacity limit in peak hours of electricity consumption. EVs can charge with maximum power when possible, but the charging power will drop as more EVs begin to be charged simultaneously. For example, the parking lot has a maximum of 32A available. When the first EV charges, it charges at 32A – the maximum capacity. When more EVs start charging, the charging capacity will be distributed evenly over the EVs.



WI-FI MESH SOLUTION

Each charger has a built-in WiFi module which is compliant with OCPP communication protocol. WiFi Mesh technique is applied to chargers by making use of the wireless communication, which greatly saves the installation cost by removing communication wires between chargers.

To establish a WiFi Mesh network, you can setup maximum 8 chargers as a group. If there are more than 8 chargers, more groups need to be setup. There is no limit to the charger quantity in total.



A 4G router is recommended to be installed at the center of all chargers or at a position with the best 4G signal coverage. The 4G router could be supplied by EN+ and it can be installed inside the charger. To keep a stable WiFi connection, the distance between 4G router and the nearest charger should be less than 50 meter. If there are walls or obstacles in between, the distance should be kept less than 20 meter. Same requirement for the distance between two nearby chargers.

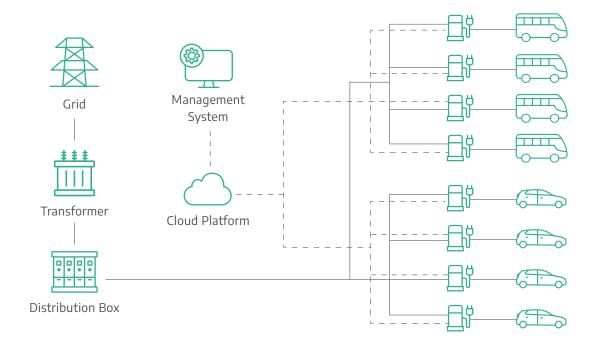
In each group, one charger with the best connection to 4G router is selected as Root, and the other chargers act as Node. All chargers communicate with each other by means of Wi-Fi and access to the 4G router through the Root. The Root also communicates with the 4G Router by means of Wi-Fi. The Router communicates with the Cloud by means of Ethernet or 4G, which is up to your decision according to the installation environment.

Advantages

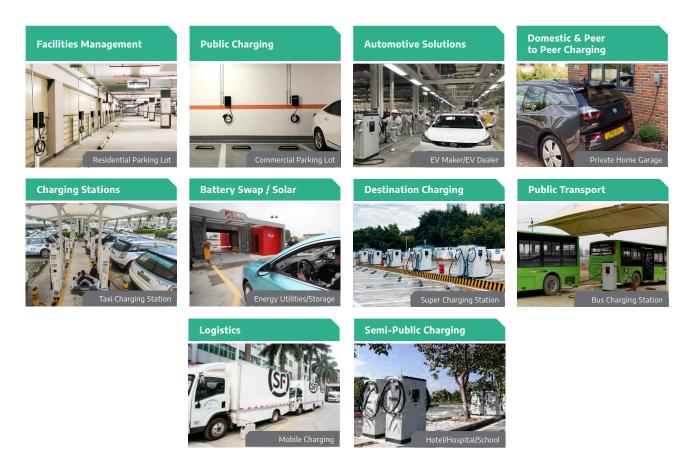
- + Less installation cost. No need to layout or connect wires between chargers and save labor cost.
- + More reliable network. If one charger breaks, nearby chargers will automatically recover connection with another charger within 50 meter distance and keep functioning.
- + Extendable quantity. More charger groups can be added in, as long as the root charger in each group is within 50 meter distance from the 4G router.
- + Faster network access. All chargers are programmed to find the most efficient path to transmit the data to the Cloud.

CHARGING SOLUTION

We provide everything that's needed to build a charging business, from charging facilities to customer services and smart energy management solutions. You can either manage your own network of charging stations or provide the service for other charger operators. All solutions are white-labelled and can be customized to meet your customers' needs.



At home, at work, or on the go, we have the electric vehicle charging solution for you. Our solution is suitable for multiple scenarios. We help you to connect with your customers. EN+ offers all you need for running a robust charging business.



PROJECT CASES





















