

VOOL Complete EV Charging Solution

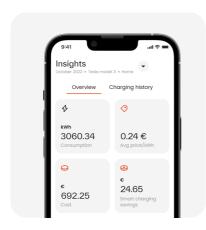
vool.com



Smart EV Charger Charge with confidence



Load Management Controller (LMC)Get the full grid connection



VOOL App Save 30% on charging costs



VOOL PortalFull control of any charging facility

^{*}Smart Charging functionality has saved VOOL customers 32% of charging costs on average, compared to the peak prices they avoided. We measured this from Aug 2023 – Feb 2024.

VOOL provides a complete EV charging solution that is equipped with max 32A/22 kW EV Charger, an intuitive EV Charging Management Platform, a Load Management Controller (LMC), and a user-friendly mobile app, all seamlessly integrated for convenience.

VOOL's modular installation design enables building charger readiness - ideal for those seeking to invest in electric vehicle infrastructure with smaller upfront costs.

Technology that allows to charge more cars with existing grid connection:

Automatic Phase Switching and Dynamic Load Management Reliable EV charging without overload.

Multi Point Load Management

Avoid costly power grid upgrades even if you need to charge many vehicles at once.

Multi Level Load Management

Combine multiple Load Management Controllers for complicated installations.



VOOL Smart EV Charger and Load Management Controller



Up to 22 kW

Enough charging power for convenient home & office charging.

Type 2 plug with 6,5m cable Lightweight, flexible and durable.

5 Year Warranty

VOOL is built to last.

Dynamic Load Management

Reliable electricity supply for EV charging.

Automatic Phase Switching

Automatically directing charging to the least loaded phase to avoid overload.

Wide Connectivity

4G, Ethernet, Bluetooth, WiFi.

Customizable faceplate options











1.
Choose your surface. You can install the
VOOL charger on a wall or a VOOL mounting

post.



2. Insert the EV Charging Controller - or don't. The VOOL EV Charging Controller can be inserted later if all you need right now is EV-charger readiness.



3.
Fix the cables and snap on the front panel.
It has an LED light guide to indicate charger status.



Install the **VOOL LMC** in the electrical cabinet for Dynamic Load Management and Automatic Phase Switching.



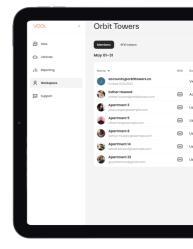
Easy and intuitive setup via the VOOL App or VOOL Portal.

VOOL Portal

The VOOL Portal provides superior EV charging management.

Property Manager

- Consumption reports by site, charger & user
- Automate invoicing for end customers
- Manage user access
- Charging site overview and device management
- Smart Charging functionality
- EV fleet overview and charging management
- Make your chargers public and earn extra revenue
- End customers of public charging can pay by Apple Pay, Google Pay or credit card

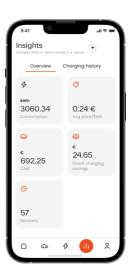


VOOL App

The VOOL App allows end-users to oversee their individual chargers.

End-users

- Market-price based charging
- · All your charging data in one place
- Intuitive installation and configuration of VOOL devices
- Proactive notifications in case of interruptions or issues with charger



Safe for all users



Integrated RCD

VOOL EV Charger has an integrated Residual Current Device (RCD) that enhances EV charger safety by promptly detecting even minor electrical faults or insulation issues, preventing electric shocks and fire hazards. This added layer of protection ensures that the charging process remains safe for users and the environment.

IP55 Certified

VOOL EV Charger is IP55 certified, guaranteeing superior defense against dust and water intrusion. This level of protection ensures it can operate reliably in indoor and outdoor settings, even under severe weather conditions.



IK10 Certified

With an IK10 certification, the VOOL EV Charger is exceptionally rugged and resistant to vandalism and external impacts.

Its high IK rating guarantees long-lasting performance, safeguarding your investment.

Double Insulated Design

VOOL EV Charger features a double-insulated design, adding an extra layer of safety for users. This insulation prevents electrical conductivity between internal components and the external casing, reducing the risk of electrical faults and ensuring user safety.

CHARGER SPECIFICATIONS



FEATURES

User identification	RFID, VOOL APP
Dynamic Load Management (DLM)	DLM' and Dynamic Phase Management (DPM)'
DLM response time	Below 50ms¹
Compatible EVSE protocols	OCPP 1.6, OCPP 2.0 ²
Energy metering	Integrated
Firmware update	OTA, USB, CAN

EXTERNAL INTERFACES

Internet connectivity	4G, Wi-Fi (IEEE 802.11 b/g/n), Ethernet 10/100
External energy meter	Modbus RTU(RS485)
Local device network	CAN

SAFETY

Residual current detection	Integrated type A and type B RCD
Compliance	LVD
Electrical protection	Protection CLASS I, overvoltage category III
Extra safety features	Relay contact diagnostics, self-test, thermal throttling

GENERAL SPECIFICATIONS

Dimensions (H x W x D)	335 x 198 x 112 mm
Weight	5.5 kg
Operating temperature	-30+50 C³
Enclosure environmental rating	Outdoor / IP55
Impact resistance	IK10
Standards	EMCD 2014/30/EU, IEC 61851-1:2017, IEC 61851-21-2:2018, IEC 62955:2018
Standard warranty	5 years
Network standards	TN, IT
Network voltage	230 VAC / 400 VAC (±10%)
Charging options	1 phase, 2 phase ⁴ , 3 phase
Rated power	22kW (32A)
EV connection	Type 2 tethered cable (6.5m)

¹ Connection with VOOL LMC is required

² Chargers installed with LMC

³ Forced ventilation available for hot environmental conditions

⁴ 2-Phase charging only available with compatible EV models; 3-phase grid connection required

LMC SPECIFICATIONS



FEATURES

Remote connectivity	OCPP 1.6, OCPP 2.0
Integration	Solar ¹ , batteries ¹
Market price monitoring	EU markets
Supported no. of chargers	64 chargers
Load management	Dynamic Load Management (DLM), Dynamic Phase Management (DPM), Multipoint Load Management, Multilevel Load Management
DLM response time	Below 50ms
Firmware updates	Automatic, OTA

EXTERNAL INTERFACES

Internet connectivity	4G, Wi-Fi (IEEE 802.11 b/g/n), Ethernet 10/100
External meter	Modbus RTU(RS485), Modbus TCP/UDP
Local device network	CAN
Current input	3x external current transformer
Voltage input	3 phase 230/400 VAC

SAFETY

Compliance	LVD
Electrical protection	Protection CLASS I, overvoltage category III

GENERAL SPECIFICATIONS

Supply voltage	90-265 VAC
AC frequency	50 or 60Hz
Dimensions (W x H x D)	61 x 87 x 77 mm
Weight	0.3 kg
Mounting options	DIN-rail, custom
Operating temperature	-20+55 C
Enclosure environmental rating	Indoor / IP22
Standards	LVD 2014/35/EU, EMCD 2014/30/EU
Standard warranty	5 years

¹ Coming soon



VOOL

Telliskivi 51b 10611 Tallinn, Estonia info@vool.com

