enelion

Quick Guide

Support for Vertica Pro

ENELION VERTICA PRO

Dear Customer,

Congratulations on your purchase of the Enelion charger and thank you for your trust.

Kindly review this manual prior to installation or usage.

Technical support
support@enelion.com

Factory Service:
Enelion sp. z o.o., 52 Mialki Szlak St, 80-717 Gdansk

Table of content

ENELION VERTICA PRO
Product Range Overview

ENELION VERTICA
SOCKET

ENELION VERTICA
CABLE

KEY FEATURES OF THE ENELION VERTICA PRO CHARGER:

- Color touchscreen enables the display of dynamic QR codes for payment processing and advertising content.
- Allows full customization of selected on-screen interface elements.
- Supports the optional integration of payment terminals.
- Provides operators with tools to communicate dynamically with end users.
- Vertica Pro streamlines station diagnostics via a dedicated diagnostic panel available in service mode.
- Socket or cable outlet positioned at a height of 96 cm enhances accessibility for users with disabilities.
- The Vertica Pro charging station is fully compliant with AFIR regulatory requirements.
- A service access hatch at the bottom of the pedestal simplifies maintenance operations.
- All new modules are backward compatible with hardware revision 6.
- Each station can be ordered in a personalized configuration, preconfigured for integration into your charging network.

TECHNICAL SPECIFICATIONS AND AVAILABLE ACCESSORIES

ENELION VERTICA PRO SOCKET

ENELION VERTICA PRO CABLE

Charging power	2 × 1.4 kW – 22 kW	2 × 1.4 kW – 22 kW
Socket / plug	2 × socket (Type 2) with lock	2 × plug (Type 2)
Spiral cable (max. length)	–	4 m working length
Minimum signal quality requirements	WiFi: -60 dBm; LTE: -85 dBm	
OLED display	4.3", touch, color	
Available protections*	RCMB / RCDA / RCDB	
Charging authorization	RFID / OCPP / FreeCharge	
Communication (OCPP 1.6)	offline / WiFi / LTE	
Energy meter	3-phase energy meter > compatible with MID certified meter	
IK protection rating	IK10	
IP protection rating	IP54	
Operating temperature	(-35°C heater)* -25°C/+55°C	
Height	1310 mm	
Inspection door	optional	
Finish	powder-coated (RAL range; anodic finish)	
Payment Terminals*	Payter Apollo and PAX IM30	

* to be purchased separatel

Safety Instructions and Guidelines

Outdoor installation of the device must not be performed during precipitation or strong winds if there is any risk that water or contaminants could enter the enclosure. Before carrying out any of the procedures described in this manual, it is essential to confirm that the power supply cable is de-energized. All work on the device must comply with applicable Occupational Health and Safety (OHS) regulations for electrical installations.

The installation must include a residual current protection device (RCD) mounted in the distribution board. This device provides both anti--tampering protection and reduces the risk of fire. If any damage is identified on key components – such as the socket, charging cable, plug, plug holder, or any other fixed part of the station – the issue must be immediately reported to the station operator.

Installation and servicing may only be carried out by qualified and authorized personnel. Repairs are permitted exclusively by the manufacturer or entities officially authorized by the manufacturer.

Procedure in the event of malfunction, disruption, or fire:

In the event of a malfunction, disruption, or fire, usage of the charging station must be discontinued immediately, and the issue reported to the station operator. In case of fire, the station should be disconnected from the power supply as soon as possible. If feasible, the vehicle should also be disconnected and moved to a safe distance. Emergency services must then be contacted – within the European Union, the general emergency number is 112. Only fire extinguishing agents approved for use with electrical equipment rated up to 1000 V should be used, such as carbon dioxide (CO_2) extinguishers, dry powder extinguishers, or sand. For detailed fire safety procedures, refer to the official recommendations of your local fire safety authority.

After the charging session is complete, the charging cable must be properly returned to its designated holder. Care must be taken to ensure the cable and plug are not in a position where they may be run over by a vehicle. Plugs that are visibly dirty or wet must not be used. The vehicle should always be parked so that the charging cable is not excessively stretched, as this may pose a tripping hazard for users or bystanders.

WARNING

The manufacturer shall not be held liable for any damage, loss, or malfunction resulting from non-compliance with the above safety guidelines.

General Regulatory Compliance and Provisions

The ENELION charger (hereinafter referred to as the device, charger, or charging terminal) is an electric vehicle charging station designed in accordance with international standards for EV charging infrastructure, including but not limited to IEC 61851, IEC 62196, and relevant EU harmonized standards under the Low Voltage Directive (2014/35/EU) and EMC Directive (2014/30/EU). The device is intended for charging electric vehicles equipped with connectors compliant with IEC 62196-2 (Type 2).

Any unauthorized interference with the mechanical, electrical, or electronic components, or with the device's software, is strictly prohibited and will void the warranty. Exceptions apply only to operations explicitly described in this manual or those agreed upon in writing with the manufacturer. The manufacturer assumes no liability for any property damage resulting from such unauthorized actions.

The electrical installation used during operation must comply with the conditions specified in the installation manual. The manufacturer is not responsible for improper execution or insufficient protection of the electrical infrastructure to which the device is connected, nor for any malfunction resulting from such an installation. Additionally, the electrical installation must conform to the applicable legal and safety standards in force at the place of installation and use. The manufacturer assumes no liability for damage caused by non-compliant electrical installations.

The device does not feature an integrated power switch. It is automatically activated when supply voltage is present. Power disconnection must be ensured through appropriate switching devices installed in the electrical system, as described in the installation manual. Except in emergency situations, the device must not be powered off during an active charging session. It is strictly prohibited to energize the device while the housing is open. The use of a charger that is mechanically damaged or displays a critical error state is not permitted.

Only objects intended for charging may be inserted into the charging socket. The sole approved connection is a functional charging cable of appropriate cross-section, matched to the device's power class and vehicle type, terminated with a Type 2 plug compliant with IEC 62196-2.

The use of extension cords, adapters, or plug converters in conjunction with the charging cable is strictly prohibited.

Due to its IP54 ingress protection rating, the charging station must not be cleaned with pressure washers, garden hoses, showers, or any source of pressurized water. The manufacturer assumes no responsibility for injury or fatality resulting from failure to comply with these safety guidelines.

Installation and servicing must be conducted in accordance with the General Warranty Terms, available at:
https://enelion.com/pl/support-vertica-pro/

Repairs may only be performed by the manufacturer, authorized service partners, or qualified personnel certified to work on this equipment. During the warranty period, only the manufacturer and authorized service centers are permitted to perform warranty-related repairs.

The manufacturer offers optional support packages (including extended warranty and service plans), which may be purchased during the warranty period, provided a qualifying inspection is successfully completed. Further details are available through the ENELION sales department.

A service inspection must be carried out once per year. Mechanical components such as the socket, charging cable, plug lock, plug, plug holder, and other fixed elements require only surface inspection. These parts are not considered wear items and are not expected to require replacement over the product's intended service life.

During inspections, special attention should be paid to indicators of wear or environmental stress — such as corrosion, water ingress, salt crystallization, or other signs of material degradation.

If any damage is observed to components such as the socket, cable, plug, plug holder, or other fixed hardware, the issue must be reported to the station operator. Replacement of these elements must be performed by an authorized service center.

Servicing operations must only be carried out with the power supply disconnected. Error diagnostics are performed by interpreting error codes and messages displayed on the device's screen.

The electrical schematic and internal layout of the device are provided in the installation manual specific to the relevant charger model.

This charging station does not support an active ventilation function.

Product Identification and Labeling Information

ENELION VERTICA PRO is a modular charging station for electric vehicles, consisting of the ENELION VERTICA PRO housing column, ENELION VERTICA PRO modules responsible for the charging process, and optional accessories and add-ons.

The modular design allows for easy adjustment of the station's functions by adding or replacing charging modules and accessories, so that the device best suits the user's specific needs.

The preparation process for commissioning the station may vary depending on the selected configuration and intended functions. After deciding to purchase the station from the manufacturer or an authorized distributor, the buyer should inform the seller of their preferred configuration settings. This will help speed up the customization process and ensure the station meets the customer's requirements.

Each module is individually configured and tested at the production stage according to the order specifications. Incorrect configuration may result in unstable operation and authorization issues. Always ensure that the module power levels are compatible with the electrical installation.

Recommendations regarding installation, assembly, configuration variants, accessories, certification by relevant inspection or commissioning authorities, and advanced settings can be found in the full device manual available at:
https://enelion.com/support-vertica-pro/

Preparing for Installation and Initial Setup

Before powering on the ENELION VERTICA PRO, ensure that the charging station has been correctly installed and does not pose any safety risk to the user. Full installation and safety guidelines are available at:
https://enelion.com/pl/support/

Verify that only properly matched module pairs are installed in the column. Acceptable configurations include modules marked as 1/2 and 2/2, 3/4 and 4/4, etc.
Do not install two identical modules in the same column (e.g., 1&1 or 2&2), as this may lead to operational conflicts or device errors.

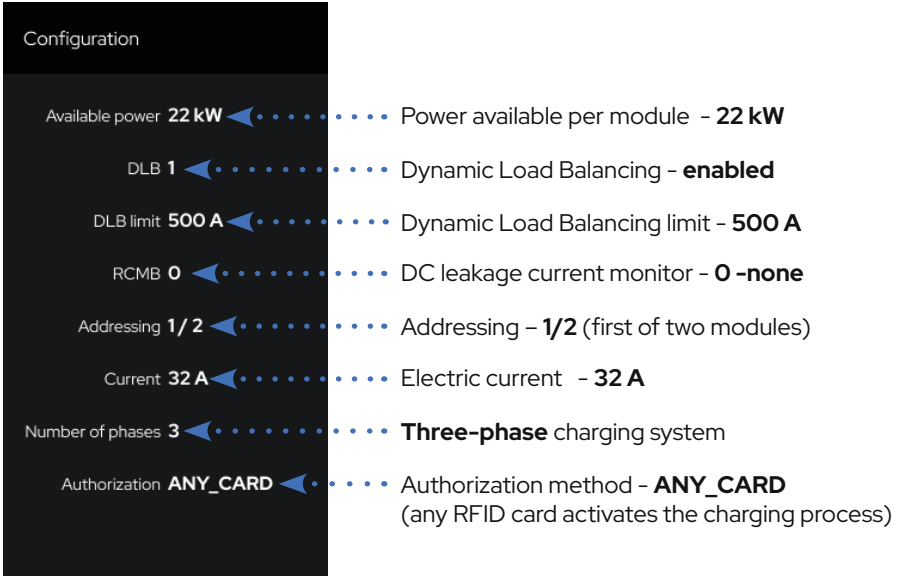
Power-On Procedure and Visual Inspection

Once all modules are correctly installed and configured, switch off the safety disconnectors and main power supply. After approximately 3 seconds, the modules will enter the initialization phase. The display will then show the configuration screen, including the pre-set parameters selected at the time of manufacturing and order processing.

Perform a basic visual inspection to confirm proper startup and system readiness before proceeding with further configuration or commissioning steps.

Default Settings and Factory Configuration

Before starting the charging process, pay attention to the configuration displayed immediately after powering on the device. The information provided will help you quickly identify the specific variant, power rating, power supply system, authorization method, addressing, and more. **The image below shows an example configuration.**



First Power-Up – Initial Display and System Ads

After the module is powered on, the initial startup screen will appear within approximately 10 seconds. This screen displays the manufacturer's logo (or a personalized logo, if configured), the device's assigned station number, and a prompt instructing the user to touch the screen anywhere to begin. The screen may also include a web address linking to user support or operator information.

After the module is powered on, the initial startup screen will appear within approximately 10 seconds. This screen displays the manufacturer's logo (or a personalized logo, if configured), the device's assigned station number, and a prompt instructing the user to touch the screen anywhere to begin. The screen may also include a web address linking to user support or operator information.

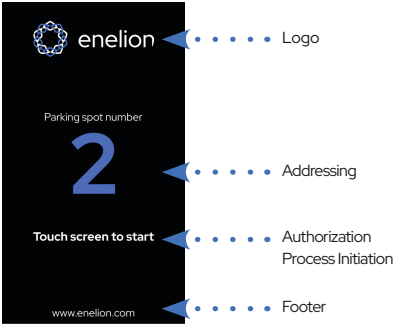
A built-in feature of the ENELION VERTICA PRO is its ability to display advertising content on the user interface. Up to 12 rotating advertisements can be shown on the display. Each ad must have fixed dimensions of 272×480 pixels at 72 DPI and will be presented for 5 seconds in a loop. Ads are preloaded at the factory during production, and remote updates are not supported.

To include custom advertisements on your charging station, please submit the files in the required resolution to the ENELION sales department at the time of order placement.

If an advertisement is currently being displayed, the user can return to the main startup screen at any time by touching the screen.

1 Startup Screen

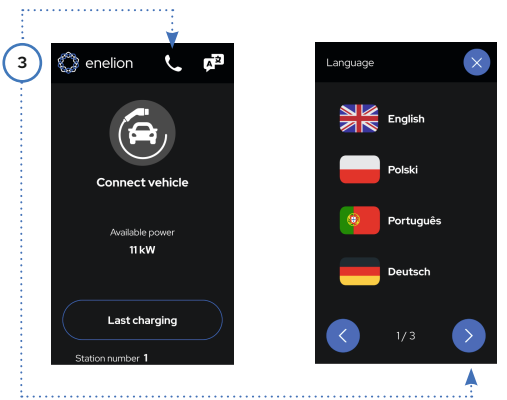
2 Ads

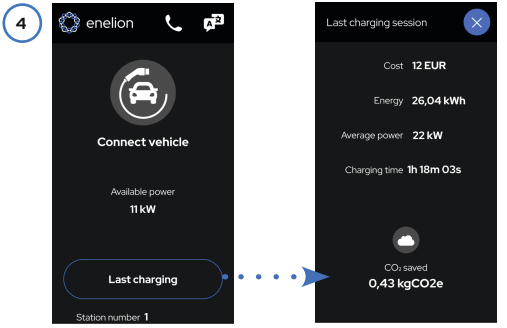


Ads Ads

Selecting Interface Language and Initial Charging Test

At any time, you can change the screen language. Click the language icon in the top right corner, then select your preferred language by clicking the left or right arrow buttons.





3 Changing the Default Screen Language

4 The interface language of the ENELION VERTICA PRO can be changed at any time from the main screen. To do so, tap the language icon located in the top-right corner of the display. Use the left (<) or right (>) arrow buttons to scroll through the available languages and select your preferred option.

Language selection does not interrupt the charging process and can be adjusted before or during user interaction with the station.

User Authorization Methods and Activation

To activate charging, a method will be required, such as tapping an RFID card on the reader above the screen. Activation via an operator app will start automatically if the "Plug & Charge" setting is enabled. This method functions similarly to the commonly used FreeCharge authorization, allowing charging to begin without user interaction once the vehicle is connected. The screen will display icons indicating the current status of the module. The charging session will begin depending on the selected authorization method, which may also include proximity payment if the station is equipped with a payment terminal.

There are 5 ways to activate charging:

The RFID card reader is located above the screen.

Any RFID tag - Any RFID card can initiate charging and will activate socket locking during the session.

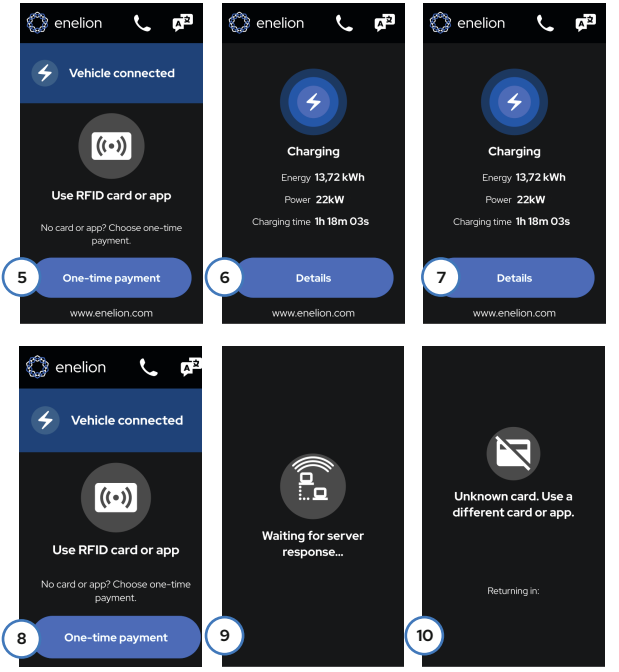
Plug and charge - Charging begins automatically after the plug is inserted into the vehicle. No user interaction is required. This method is functionally equivalent to the commonly used FreeCharge authorization.

Plug and charge with lock- After connecting the plug, charging starts automatically and the socket locks for the duration of the session (applicable to modules with a socket). This method also corresponds to FreeCharge behavior, with added physical locking for safety.

Authorized RFID -Only pre-authorized RFID cards can start charging and activate socket locking during the session.

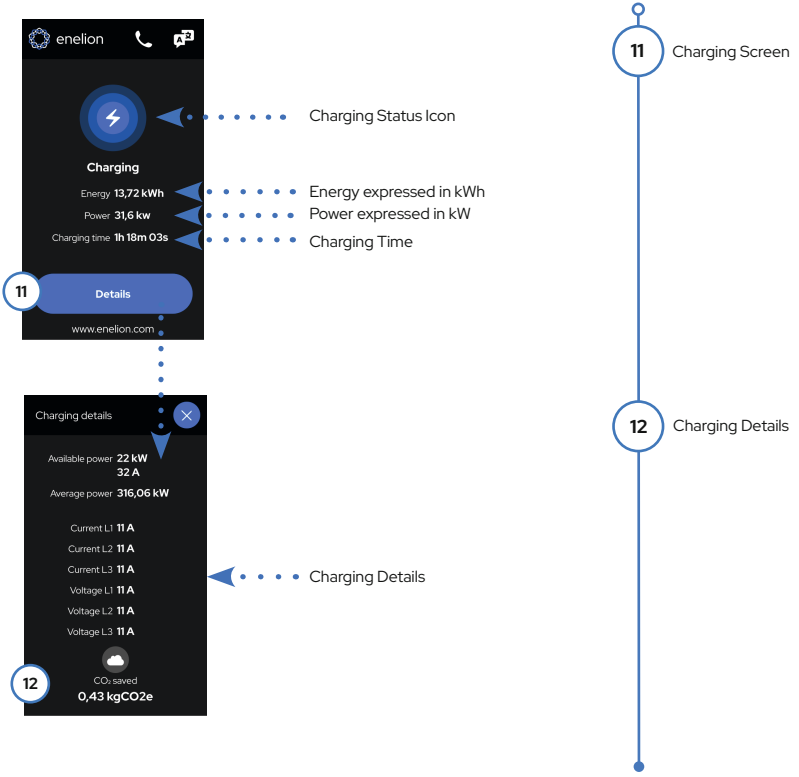
OCPP- OCPP – Charging is initiated via an operator's app or a predefined RFID card, using the Open Charge Point Protocol.

Invalid RFID card - Invalid RFID card – The presented card is not recognized. Use a valid RFID card or initiate the session through the operator app.



Charging – From Start to Stop

The charging process begins automatically after successful activation. During the session, you can view detailed information by selecting the “Details“ button on the screen. The station’s LED indicators will change color to confirm that charging is in progress.



How to Pause or End Charging Sessions

The charging process can be stopped at any time using several methods. This will depend on how charging was activated**. A universal method that works with all settings is to stop charging by disconnecting the power cable from the car first, and then from the station.** Below are the available methods for stopping charging:

Charging can be stopped in one of the following five ways:

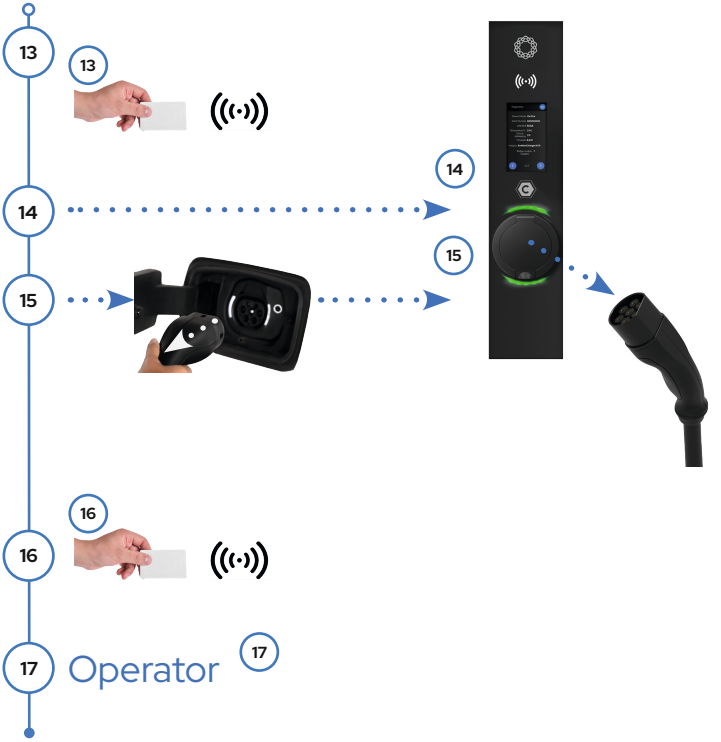
Any RFID tag - Tap any RFID card on the reader to stop the charging session.

Plug and charge – Simply unplug the cable from the station. This method is commonly referred to as FreeCharge, where the session ends automatically upon disconnection.

Plug and charge with lock - First, stop the charging process from the vehicle side (using the vehicle's interface). Then, unplug the cable from the vehicle, followed by the station. This method also reflects FreeCharge behavior, with the added safety of socket locking during the session.

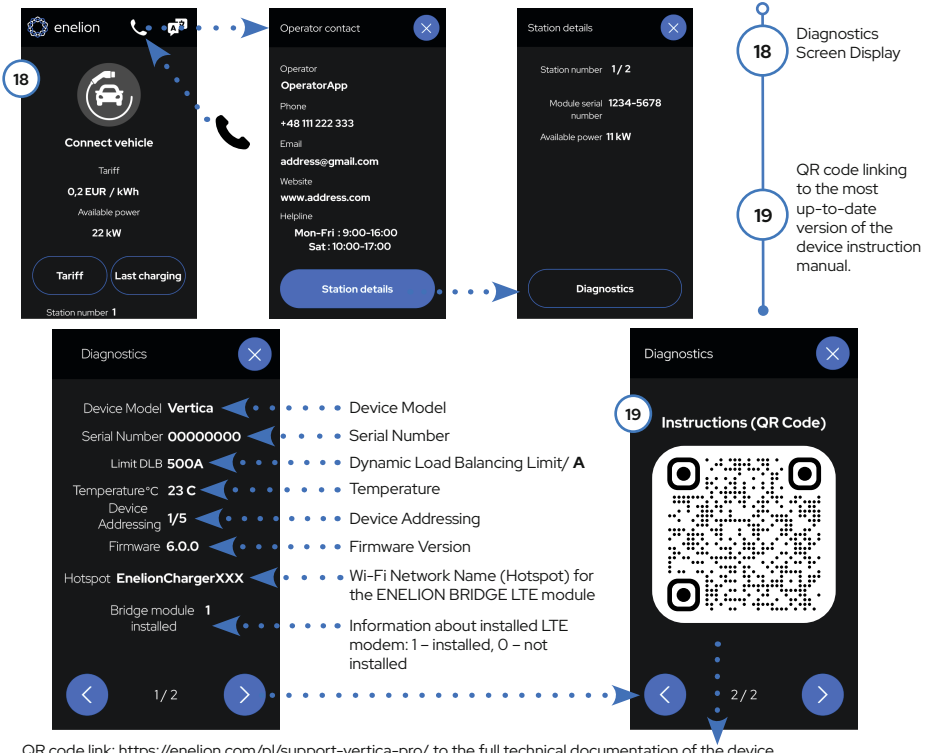
Authorized RFID - Tap a registered RFID card on the reader to safely stop the session and unlock the socket.

OCPP- Use the operator's app or backend system to remotely stop charging via the Open Charge Point Protocol (OCPP).



Real-Time Station Status and System

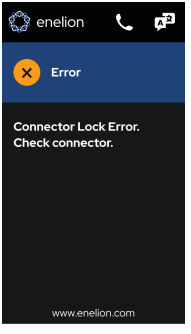
ENELION VERTICA PRO introduces new functionality allowing users to access key station parameters and technical support directly from the interface. To access support information, tap anywhere on the startup screen, then select the headset icon located at the top of the screen. This will open the Contact with Operator tab, which displays contact details for reporting faults, requesting assistance, or resolving activation issues. For technical information, navigate to the Diagnostics tab (page 2 of the support menu). There you'll find a QR code linking to the full device documentation and support resources. Scanning the QR code is straightforward and provides immediate access to detailed product guidance, including manuals and troubleshooting procedures.

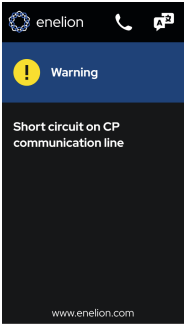


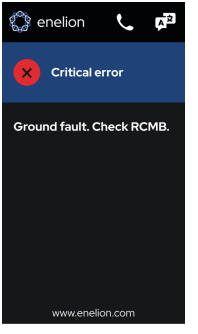
QR code link: https://enelion.com/pl/support-vertica-pro/ to the full technical documentation of the device.

Error Codes, Fault Conditions, and Recommended Actions

During operation, the device may display error codes on the screen. These errors can result from various issues, such as an improperly inserted plug or a temporary communication fault.
In most cases, a simple retry—such as reconnecting the plug or restarting the action—may resolve the issue. Always follow the on-screen instructions, which are tailored to the specific error condition.
If a QR code is displayed, scan it with a mobile device to access detailed troubleshooting steps and recommended solutions based on the detected fault.In most cases, a simple retry—such as reconnecting the plug or restarting the action—may resolve the issue. Always follow the on-screen instructions, which are tailored to the specific error condition.
If a QR code is displayed, scan it with a mobile device to access detailed troubleshooting steps and recommended solutions based on the detected fault.







Or scan the QR code

All error codes can be found at: http://service-support-enelion.happyfox.com/kb/section/9/

Communication Options (incl. ENELION BRIDGE LTE)

The ENELION BRIDGE LTE is a key component for enabling internet connectivity in ENELION VERTICA PRO modules via an LTE mobile network. It supports critical communication features required for remote station management and is essential for working with OCPP (Open Charge Point Protocol) configurations.
One of its core functions is integration with ENELION CHAIN (CAN), a Controller Area Network that allows a single Master module equipped with BRIDGE LTE to control and manage up to 98 Slave modules. This internal communication backbone enables coordinated operation across multi-module installations. For detailed connection architecture, refer to the VARIANT CONNECTIONS – ENELION CHAIN section in the full device manual
Before using LTE-dependent functions, ensure that a SIM card is installed in the module.
Instructions for this process can be found in the Connecting to LTE – SIM Card section of the manual.
The ENELION BRIDGE LTE module enables the following:

Preview and Basic Management of Charging Points

Through the ENELION configuration panel, operators can access real-time data and perform basic control functions for each charging point. Available features include:

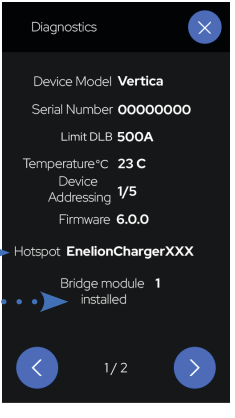
- Charging point status monitoring – View current operational state of each module
- Energy meter readings – Access current and historical consumption data
- Real-time charging power – Monitor active charging session power in kilowatts
- Available power – Check the power limit available to the station
- Socket control – Lock or unlock the charging socket remotely
- Remote restart – Perform a system reboot of the selected charging point
- LTE connectivity status – Monitor signal and connection to mobile network
- Wi-Fi connectivity status – View local hotspot connection parameters
- Integration with OCPP 1.6 (JSON) – Ensure live communication with backend systems using the Open Charge Point Protocol

ENELION VERTICA PRO charger supports connection to the configuration panel through a Wi-Fi hotspot created by the ENELION BRIDGE LTE module. To verify whether your charger is equipped with an ENELION BRIDGE LTE module and to identify the correct network for connection, follow these steps:
Tap anywhere on the startup screen. Tap the headset icon located at the top of the display. The Contact with Operator screen will appear. Tap the Station Details button, then select Diagnostics. In the HOTSPOT section at the bottom of the screen, you will find the Wi-Fi network name (SSID) broadcast by the device. Use this network name to connect from a configuration device (e.g., tablet or laptop) and access the web-based configuration panel.

Wi-Fi Network Name (SSID): Identifies the local hotspot broadcast by the ENELION BRIDGE LTE module. This network enables access to the configuration panel via Wi-Fi.

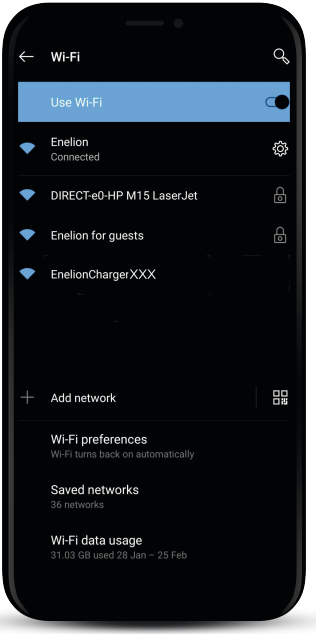
LTE Modem Installation Status: Indicates whether an LTE modem is present in the module:

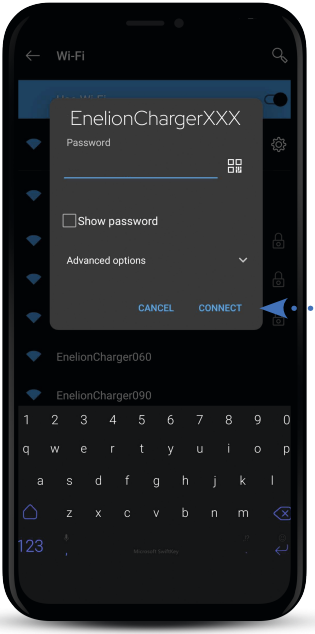
1 – LTE modem installed
0 – LTE modem not installed



Establishing a Connection to the Web Configuration Interface

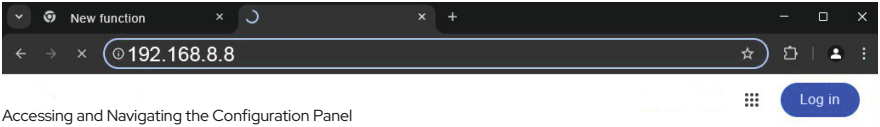
To access the configuration panel, begin by connecting to the charger's Wi-Fi hotspot using a laptop, tablet, or smartphone. After powering on the device, wait approximately 3 minutes for the hotspot to initialize. Then, refresh the list of available networks by toggling your device's Wi-Fi off and back on.
The network name (SSID) will appear in the format: EnelionChargerXXX where XXX represents the last three digits of the ENELION BRIDGE LTE module's serial number.
By default, this network is not password protected. Select the network from the list to connect your device to the charger's local configuration interface.





Accessing and Navigating the Configuration Panel

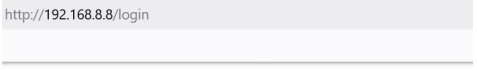
Once connected to the charger's Wi-Fi hotspot, open a web browser on your device and enter the following address in the address bar: http://192.168.8.8

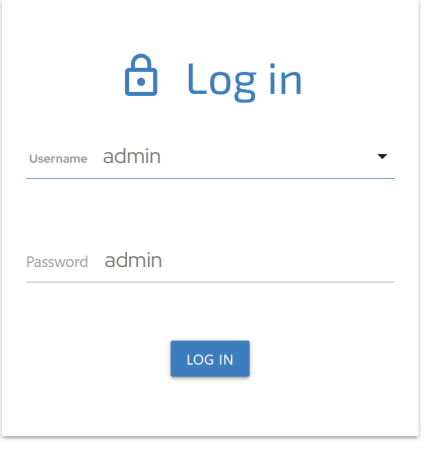


Accessing and Navigating the Configuration Panel

This will open the ENELION configuration panel login screen. Two types of accounts are available: User, Admin

The default password for both accounts is the same as the username. It is strongly recommended to change the default password in the settings after the first login to ensure secure access.



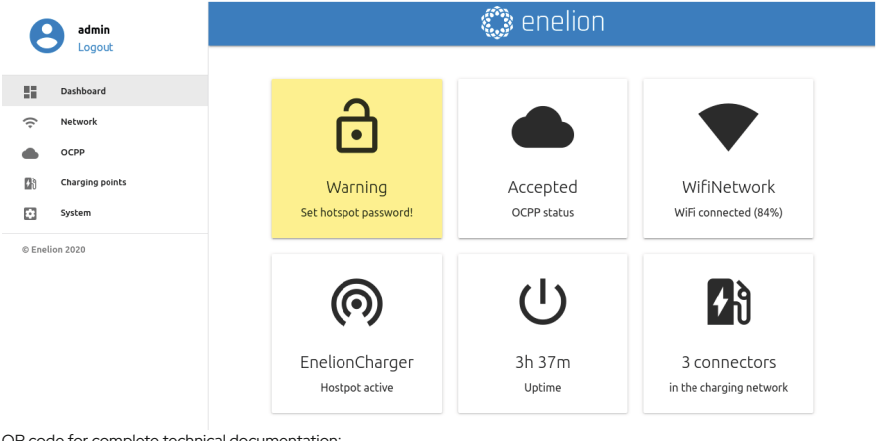


If the configuration panel password is lost, the device can be reset to factory settings. To perform the reset, click the "Forgot password?" link on the login screen and confirm the action when prompted.

Important: This process will erase all previously saved settings. After the reset, the charger will require full manual reconfiguration.

Interface Overview – Configuration Dashboard

The configuration panel features a user-friendly layout designed for efficient navigation and control.
The interface consists of the following key elements:
A top bar displaying the ENELION logo, visible across all subpages
A side menu showing the name of the logged-in user and links to individual configuration sections
A main content area displaying the selected subpage's content and settings
For detailed guidance on all available settings and options, refer to the full technical documentation available online.



QR code for complete technical documentation:
https://enelion.com/pl/support-vertica-pro/

Notes

Notes

Technical Support

The most up-to-date full version of the device manual, along with additional documentation and instructional videos, is available at:
https://enelion.com/support-vertica-pro/

Revision: V 1
Number of pages: 24
Released: June 12, 2025

Enelion sp. z o.o. | 52 Mialki Szlak St
80-717 | Gdansk | Poland

sales@enelion.com
enelion.com