

# NEX-PLUG-50/TWIN NEX-PLUG-50

Vehicle Energy Management System (EVEMS) with One or Two NEMA 14-50 Smart Plug



NEMA 14-50 PLUG



Nex-Plug-50 is a smart panel with one or two Electric Vehicle Energy Management System (EVEMS) featuring one Nema 14-50 plug to connect a plugged-in EV charger. This smart panel featuring one or two embedded Nema14-50 plugs will reduce installation costs and enable seamless connection of an electric vehicle charger to the electrical panel, even in cases where the panel lacks the necessary capacity for a direct connection.

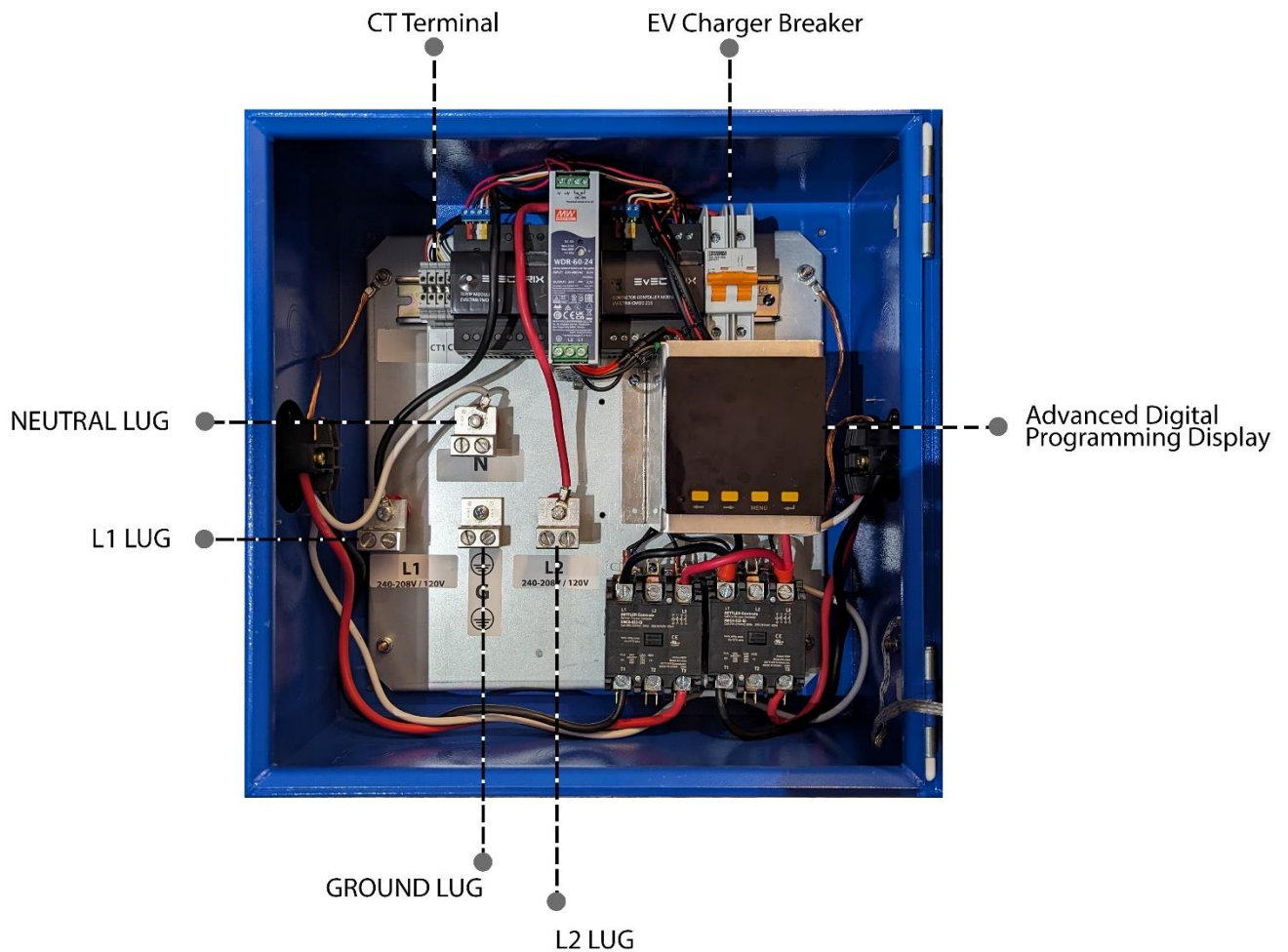
It has a networkable (for Town House) or standalone mode (for single House) including the real-time clock in networkable mode.

* PRODUCT SPECIFICATION	
NEX-PLUG-50	NEX-PLUG-50/TWIN
<b>INPUT:</b> 208/240 VAC UP TO 200A <b>CONTROL VOLTAGE:</b> 24 VDC 2A <b>DIMESNION :</b> 16"x16"x8" <b>WORKING TEMPERATURE :</b> -20°C to +40°C <b>STORAGE TEMPERATURE :</b> -20°C TO +40°C <b>OUTPUT:</b> 1 xNema 14-50 208/240 VAC UP TO 50A <b>ENCLOSURE TYPE:</b> NEMA 3R <b>WEIGHT:</b> 28 lb	<b>INPUT:</b> 208/240 VAC UP TO 200A <b>CONTROL VOLTAGE:</b> 24 VDC 2A <b>DIMESNION :</b> 16"x16"x8" <b>WORKING TEMPERATURE :</b> -20°C to +40°C <b>STORAGE TEMPERATURE :</b> -20°C TO +40°C <b>OUTPUT:</b> 2xNema 14-50 208/240 VAC UP TO 50A <b>ENCLOSURE TYPE:</b> NEMA 3R <b>WEIGHT:</b> 31 lb

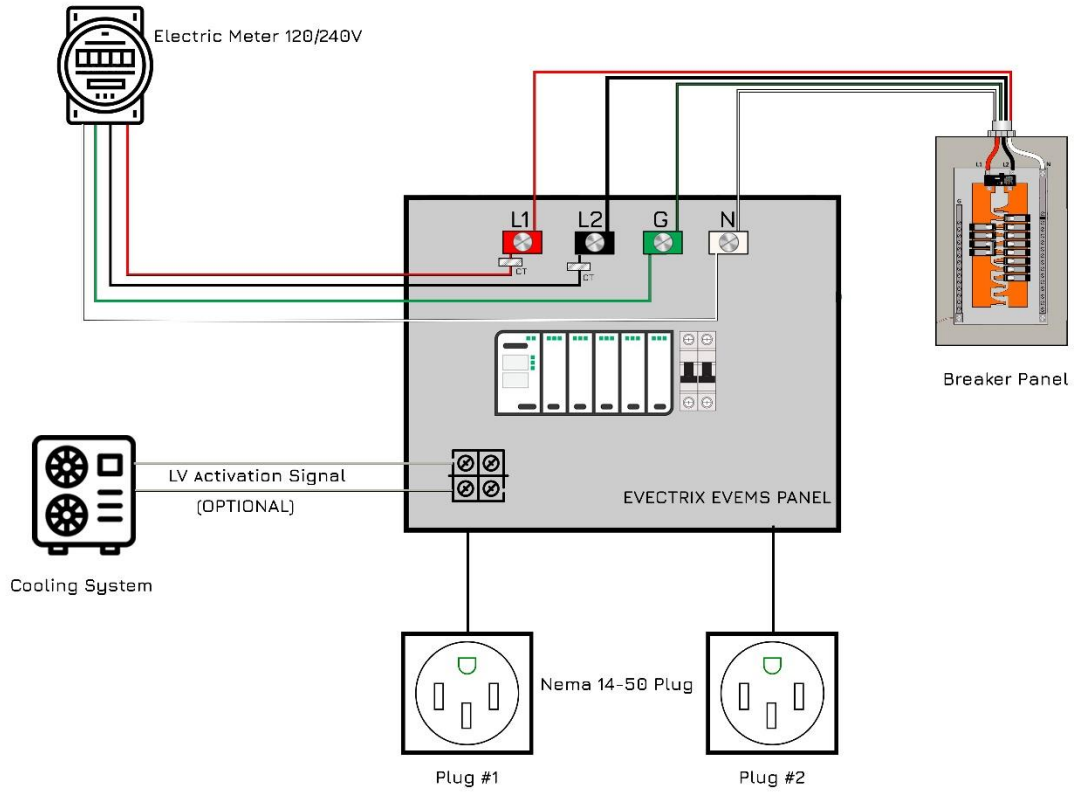
\* Specifications are subject to change without prior notice.

## How It Works:

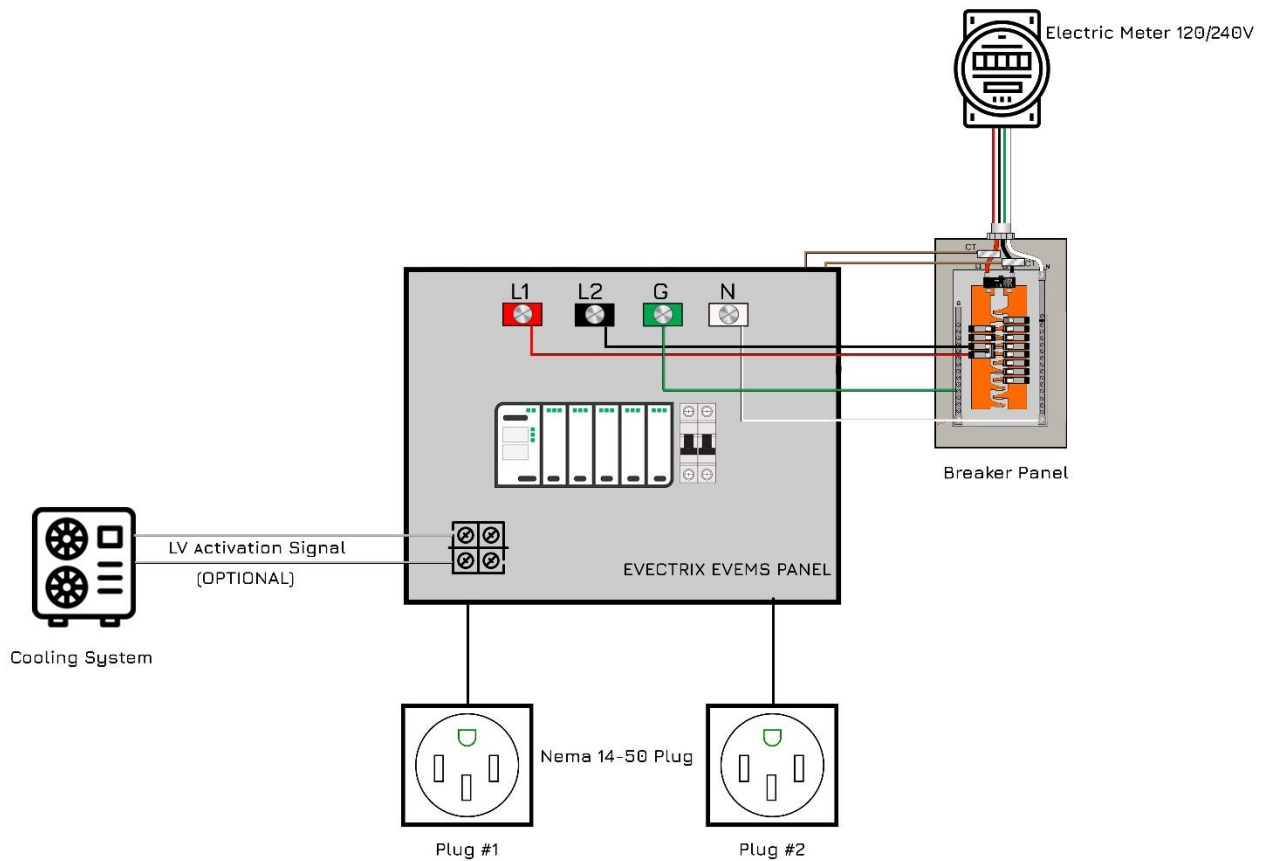
- Continuously monitors the real-time total power consumption of the home's electrical panel.
- Detects instances when the total power consumption surpasses 80% of the main circuit breaker's capacity and initiates a temporary de-energization of the EV charger.
- Automatically restores power to the EV charger when the total power consumption of the electrical panel remains below 80% of its capacity and reaches the low limit programmed threshold of its capacity for a duration exceeding 15 minutes.
- Requires the availability of a double pole breaker slot in the panel.( in installation method 2)



## INSTALLATION METHOD 1



## INSTALLATION METHOD 2



### WARNING :

- The EVETRIX panel MUST be installed and commissioned by a certified electrician based on National and Local Electrical codes otherwise the spare warranty will be voided.
- EvectriX panels operate at 208/240 VAC, which poses a significant electrical hazard. Always exercise extreme caution and follow proper safety protocols during installation. Hazard Voltage. Will cause severe injury or death.
- Before installation, ensure that the power supply to the charging system is completely shut off. Verify the absence of voltage using suitable testing equipment before starting any work.
- Cease utilization of the Panel promptly in the event of any defects, cracks, breakages, or damages. Under no circumstances should you attempt to alter, repair, or disassemble the EVETRIX panel. Kindly reach out to the manufacturer in case of any malfunctions or issues.
- Avoid installing the EVETRIX panel near flammable materials, explosives, fuels, chemical products, and vapors. Refrain from utilizing any cleaning solvents to clean the panel.
- Ensure that the control panel is properly grounded according to local electrical codes and regulations.
- Provide adequate ventilation for the control panel to prevent overheating. Avoid installing panels in enclosed spaces or near heat sources. During operation, it is essential to keep the panel door securely closed.
- Adhere strictly to the manufacturer's installation guidelines for wiring, ensuring correct wire gauge, proper grounding, and appropriate circuit protection to handle the high voltage requirements.
- Implement appropriate isolation mechanisms, such as lockout/tagout procedures, to prevent accidental energization of the system during installation or maintenance.
- Encourage periodic inspections by qualified professionals to identify any potential issues or wear and tear, ensuring the safe and efficient operation of the EV charging system