

We are committed to the efficient use of energy
Become the first choice of users for energy management solutions!



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Company Profile

Always-control Technology Co., Ltd.

It is a high-tech enterprise with mature and stable development capabilities.

We have an excellent professional R&D team, focusing on the development and research of energy management system (EMS) edge computing smart gateway and new energy smart management cloud platform, providing customers with innovative and efficient solutions.

Why choose us?

Precise optimization

- AI algorithms and big data analytics
- Create intelligent scheduling and reduce operating costs

Low-cost access

- Multi-layer encryption and anti-interference design
- Ensure the seamless operation of data and systems



Flexible deployment

- On-premise and cloud-based
- Meet the needs of multiple scenarios

Efficient O&M

- Round-the-clock equipment monitoring
- Intelligent fault diagnosis to improve system reliability

Safe and stable

- No complex retrofitting is required
- Quick access to different brands and types of devices

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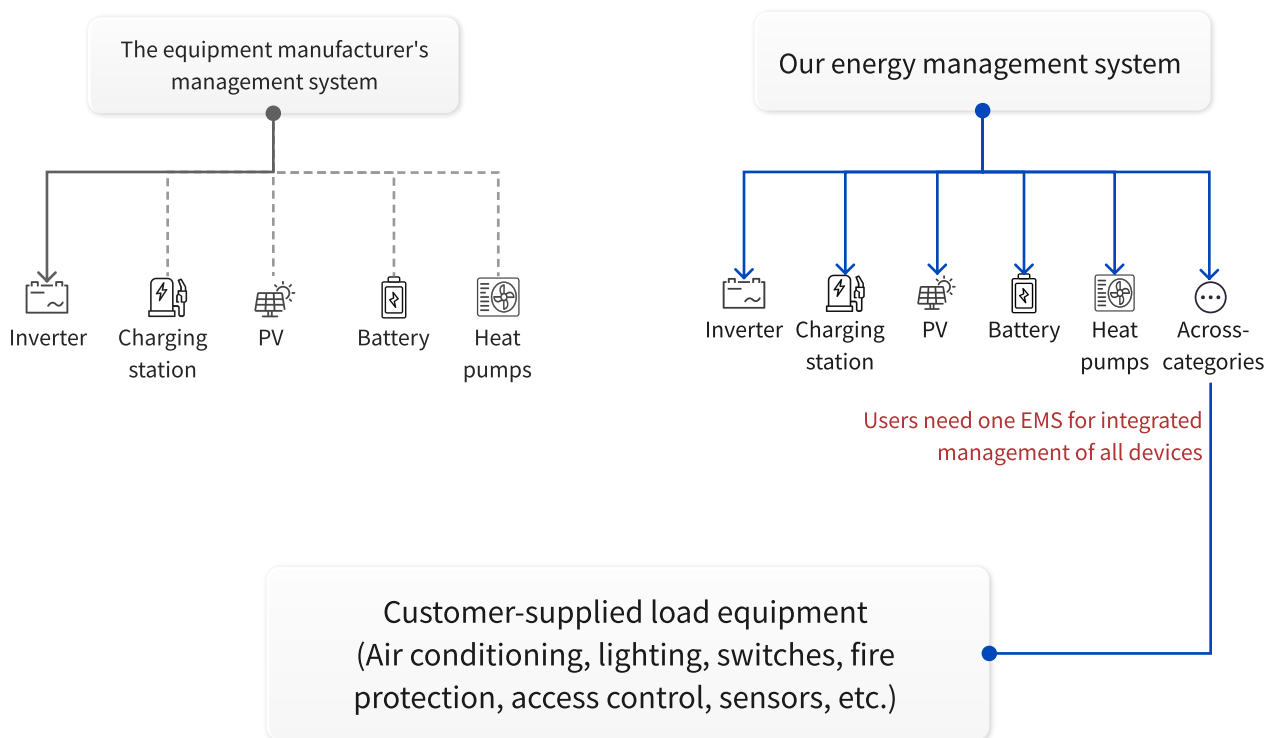
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Product Introduction

"Cross-brand, cross-type" smart energy management solution.

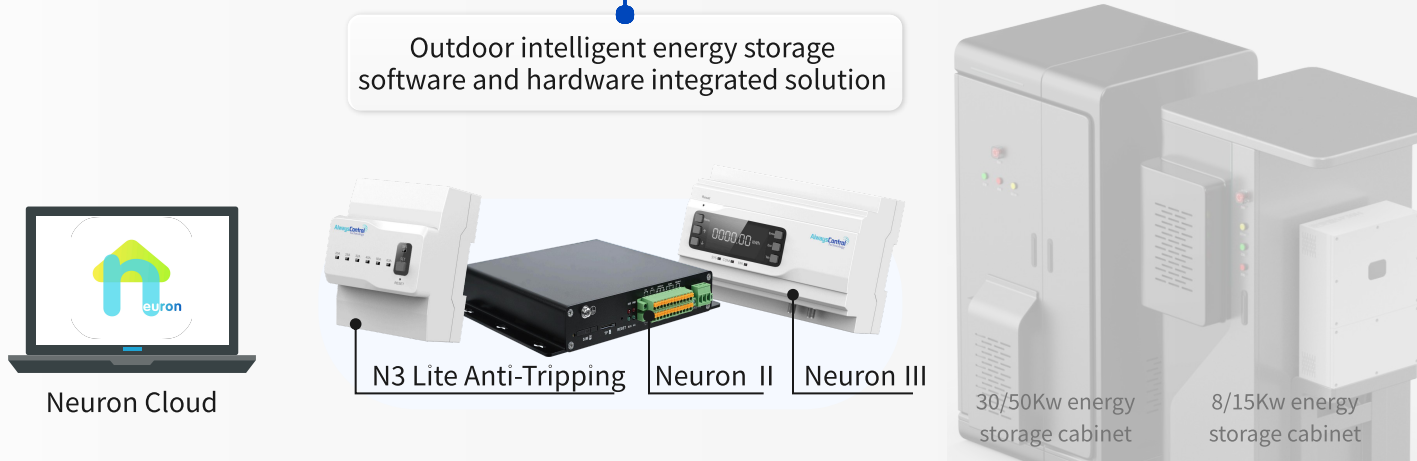
- In today's multi-device, multi-brand energy management environment, users are faced with the following issues:
- The equipment comes from different manufacturers, and the management system is independent and complex.
 - The monitoring data is scattered, and efficient energy dispatch cannot be realized;
 - O&M costs remain high, and the response speed is difficult to meet demand.

Our Neuron energy management system is a "cross-brand, cross-type" smart energy management solution, integrating distributed energy storage equipment, load equipment and sensing equipment to achieve intelligent control, energy saving and consumption reduction, as well as real-time monitoring in the cloud, and comprehensively improve system efficiency and reliability.



- | | | | | | |
|--------------------|---|-----------------|-----------------|----------------|-------------------|
| Robot vacuums | Smart door locks | Smart cat's eye | HVAC panels | Indoor camera | IR remote control |
| Infrared detectors | Door/Window Magnetic Intrusion Detector | Gas sensors | Lighting series | Curtain motors | Background music |

Application scenarios



Diversified application scenarios, comprehensive coverage of user needs.



New energy management system

Intelligent management and reliable energy control

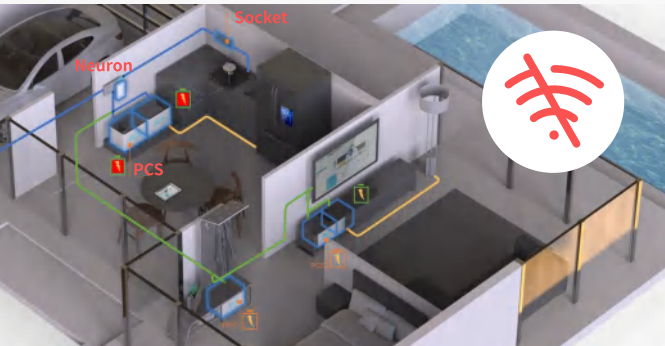
Make your inverter and energy equipment more efficient, reliable and flexible

Our new energy management system is designed to solve energy management problems in complex environments, and is particularly suitable for inverter manufacturers' application scenarios. Through powerful data analysis, intelligent control and flexible expansion, it improves your energy management efficiency and reliability.

Typical application scenarios

Inverter manufacturers: Provide complete supporting energy management solutions for inverters to enhance product intelligence and interoperability.

Main Features



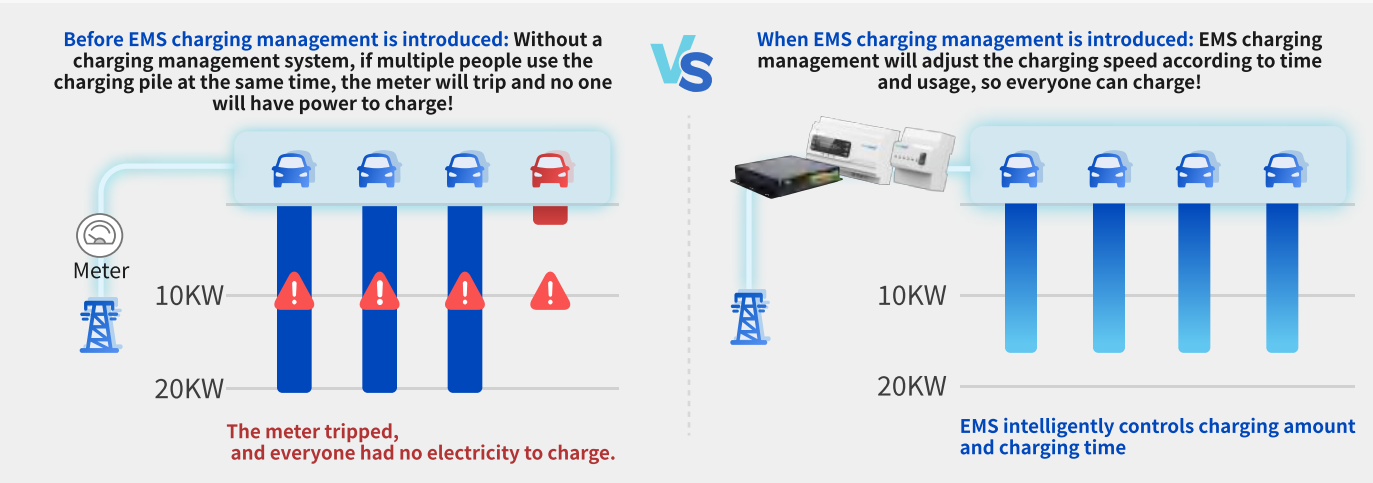
Edge computing in environments without 4G or signal coverage

In areas without signal coverage, the system can provide local data storage and comprehensive analysis of power usage, ensuring data recording and monitoring even under extreme conditions.



Local monitoring and data backup during network outages

Even in the event of a network outage, the local smart gateway can continue to monitor and record various energy strategies and data. Once the network is restored, it will automatically upload the data to the cloud to ensure data integrity and security.



Multi-pile interaction and Dynamic Load Balancing (DLB)

Multi-pile interaction and dynamic load balancing optimize charging power through intelligent scheduling, ensuring that the site is not overloaded and improving charging efficiency. The system can dynamically adjust the charging sequence and power distribution according to the vehicle SOC, grid load and reservation status, and combine with EMS to achieve multi-energy synergy such as photovoltaics and energy storage, reducing costs and improving user experience.

System Advantages

Intelligent management

Through data collection and intelligent algorithms, it provides real-time energy monitoring, status reporting, fault diagnosis and other services to help users optimize energy configuration and management.

Flexible expansion

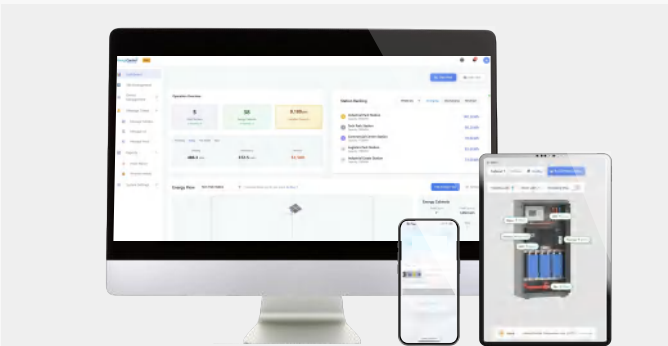
Supports access to multiple brands of equipment, meets various energy management needs, and helps manufacturers improve their market competitiveness.

High reliability

Even in extreme environments, the system can ensure uninterrupted energy management and maximize the reliability and safety of the power system.

User-friendly interface

The simple and easy-to-use interface supports both mobile and PC operations, improving user experience and simplifying the operation process.



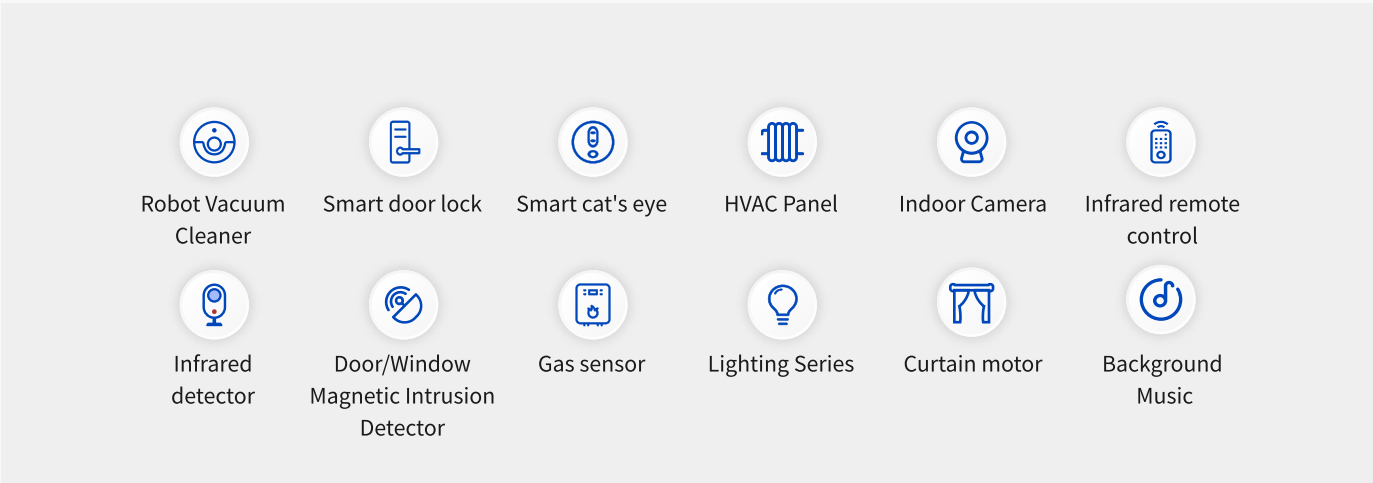
Photovoltaic storage and charging interaction mode and data integration display

This system supports the interactive mode of photovoltaic energy storage and charging, and can integrate data from different energy devices to provide an intuitive display interface to meet the photovoltaic storage and charging system management capabilities not provided by the original manufacturer.



Bypass/circuit breaker/smart socket/switch integration

The system can collaborate with bypass devices, circuit breakers, smart sockets and switchgear to provide comprehensive microgrid ecological management in power outage/power failure states, ensuring that basic energy supply and intelligent management can still be maintained in the event of power failure.



Equipment expansion and cross-brand compatibility

The system supports the expansion of DI/DO devices from other manufacturers and seamlessly integrates with other devices to create a flexible intelligent energy management platform, break down brand barriers, and meet the compatibility requirements of multi-brand devices.

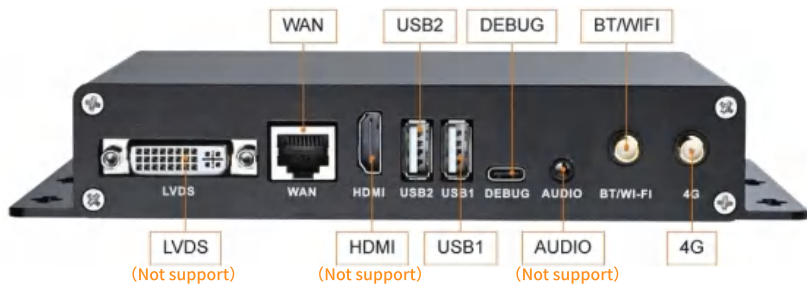
Neuron II-Intelligent Controller

- Support LTE, WiFi, wired communication
- Multi-Device Interaction
- Multi-protocol compatible
- Support access to expansion modules
- Open access to other cloud platforms

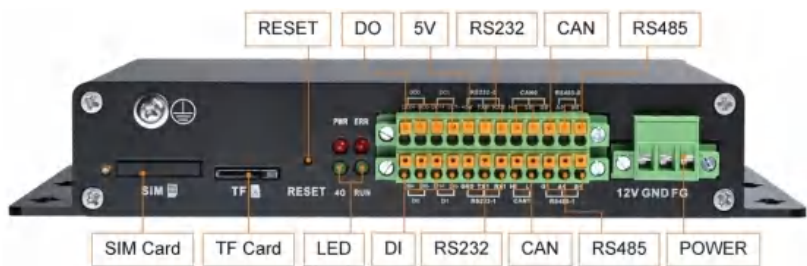


The NeuronII gateway stands out for its outstanding versatility, not only supporting LTE, WiFi, wired communication, but also being compatible with multiple protocols, and can be enhanced by access to expansion modules, providing users with flexible and efficient connectivity solutions.

Hardware interfaces



Neuron II (N2) Front-view



Neuron II (N2) Back-view

Product Specifications

Product model	Neuron II
Configuration	
CPU frequency	T113-i,1.1GHz
Memory	512MB,DDR3
eMMC	4GB
Interface	
UART	2CH RS232; 2CH RS485
CAN BUS	2CH
Ethernet port	1CH 10/100M, RJ45
Bluetooth/WIFI	Bluetooth, WIFI integrated module, Bluetooth 5.0
LTE	TDD-LTE:B34/B38/B39/B40/B41 FDD-LTE:B1/B3/B5/B8
Installation	Wall-mounted
Power	
Power supply	Rated voltage: DC12V, input range DC11V-12V
power	20W
Environmental requirements	
Relative humidity	5%~95% non-condensing
Operating temperature	-40°C~85°C
Storage temperature	-40°C~85°C
Dimension	
Size	193 x 158 x 33mm (7.598 x 6.22 x 1.299 in)

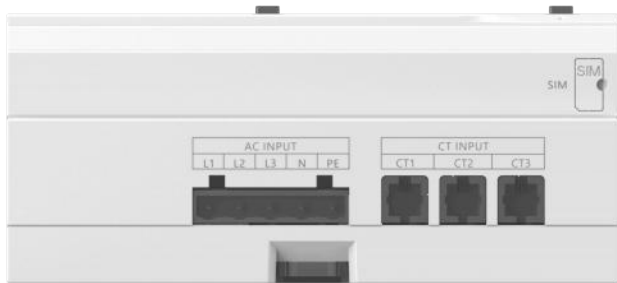
Neuron III

A commercial-grade Intelligent controller with integrated meter

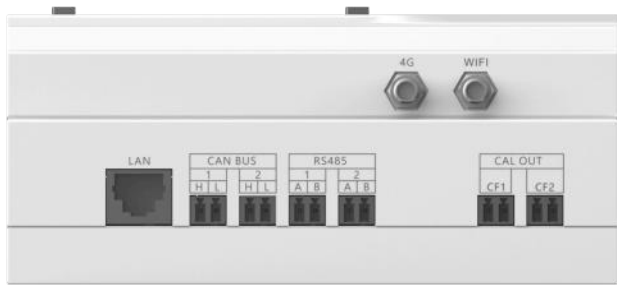
- With electric meter and display
- Multi-protocol compatible
- Support flexible configuration
- Real-time maximum charging current control
- Support power line communication,WiFi,LTE, Bluetooth



Hardware interfaces



NeuronIII(N3) Top-view

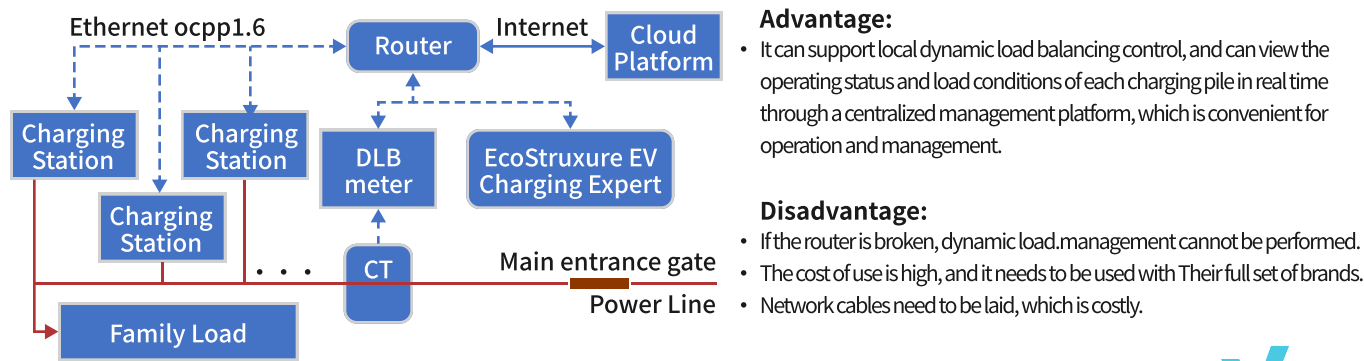


NeuronIII(N3) Bottom-view

Product Specifications

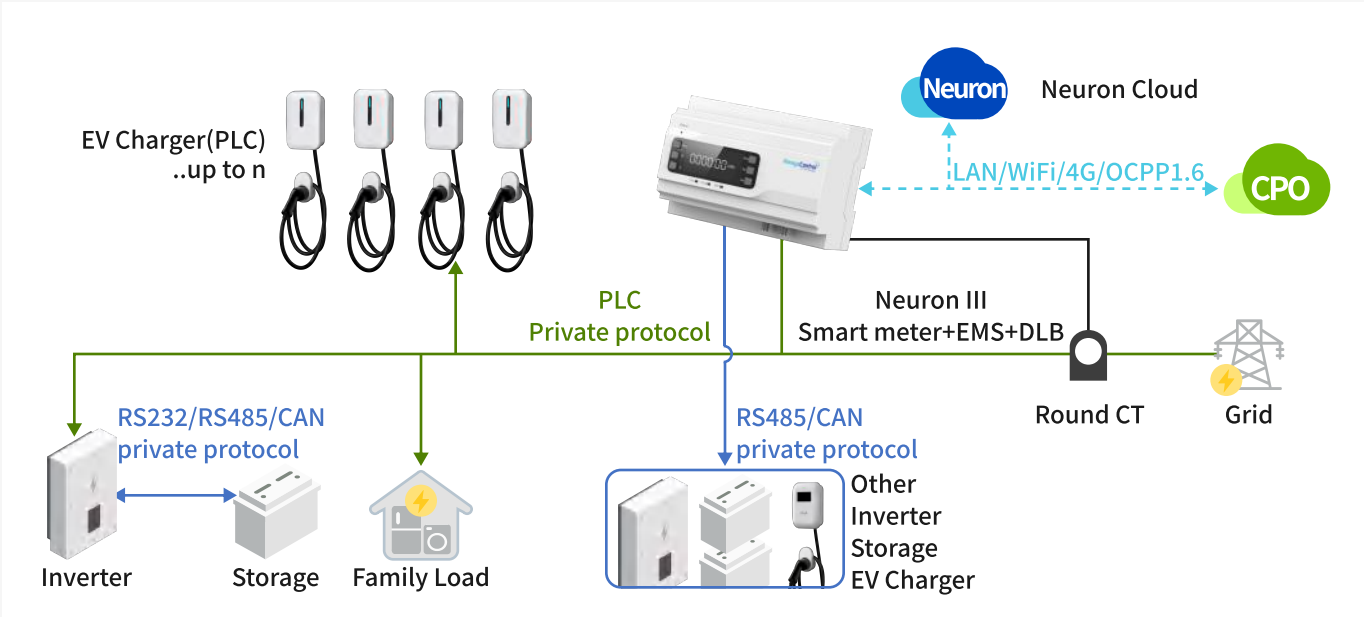
Product Model	Neuron III
Configuration	
CPU frequency	RK3128 ARM® Cortex™-A7 Quad-core 1.3GHz
MCU	GD32F305RCT6 ARM® Cortex®-M4 32-bit MCU
Memory	512MB, DDR3
eMMC	8GB
Bluetooth, WiFi	WiFi, Bluetooth integrated module, WiFi supports: 802.11b Bluetooth 5.0
LTE	LTE Features: Supports up to Category 1 FDD Supports 1.4/3/5/10/15/20 MHz RF bandwidths GSM Features: Supports 850/900/1800/1900 MHz
PLC	Support P1901.1, support OFDM/FSK modulation
LCD	128 x 64 monochrome LCD
Button	Panel buttons*6, Reset button*1
Indicator Lights	LED*3 (red, yellow, green)
Interface	
UART	2-way RS485
CANBUS	2-way
Calibration interface	Calibration interface*2
Network port	1-way, 10/100M, RJ45
CT ring interface	3-way CT ring input interface
Temperature and humidity	
Humidity	RH range: 0~100%RH
Temperature	T°C range: -40~125°C
Power supply	
Rated voltage	230/380Vac
Input frequency	50Hz/60Hz
Power consumption	≤10W
Environmental requirements	
Relative humidity	25%~85%, no condensation
Operating temperature	-25°C~55°C
Storage humidity	≤85%
Dimension	
Size	150 x 103 x 66.5 mm(4.063 x 5.906 x 2.617 in)

Commercial solutions from other company

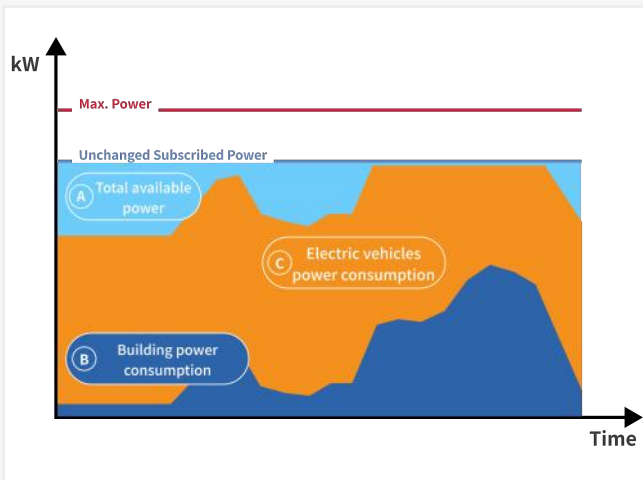


Our Commercial solutions

Architecture



Dynamic load management



Dynamic load management: Real-time monitoring of power consumption and intelligent allocation of available power to electric vehicles based on the actual needs of household loads, enabling fast and efficient charging of electric vehicles.

Key features

- Hardware:**
- Can use PLC to communicate with our partners charging station and inverters/batteries
 - Can use RS485/CAN private protocols to communicate with other brands.
 - Can use LAN/WiFi to communicate with customer CPOs.
 - Anti-tripping function:** automatically adjust charging power according to home grid load.
- Software:**
- Key points:** Peak shaving and valley filling, equipment monitoring function.
 - Neuron settings: set dynamic load balancing mode, maximum current, peak shaving and valley filling mode, etc.
 - Chargers settings: scheduled charging, plug-and-play charging mode, etc.
 - Overall real-time data display settings and usage status.
 - Other equipment settings.
 - Overall historical data analysis: electricity bill statistics, cost savings, Usage, etc.
 - Information notification.

Software Features Comparison

Function	N3	N3 Lite	EcoStruxure EV charging Expert	Anti-tripping module
Peak shaving and valley filling	✓	✗	✗	Need to match with their hems module
Dynamic load balancing	✓	✓	✓	✓
Schedule charging	✓	✗	✓	Need to match with their hems module
Plug and charge	✓	✗	✓	Need to match with their hems module
Real-time data display	✓	✓	✓	Need to match with their hems module
Historical data analysis	✓	✓	✓	Need to match with their hems module
Remote Control	✓	✓	✓	Need to match with their hems module
Energy Management	✓	✗	✓	Need to match with their hems module
Troubleshooting	✓	✓	✓	Need to match with their hems module
Firmware Upgrade	✓	✓	✓	Need to match with their hems module

Hardware Comparison

Product	N3	N3 Lite	EcoStruxure EV charging Expert	Anti-tripping module
LCD	✓	✗	✗	✗
PLC Private Protocol	✓	✓	✗	✓
Bluetooth	✓	✓	✗	✗
Anti-tripping function	✓	✓	✓	✓
RS485/CAN private protocol	✓	✗	✓	✓
Ethernet /WiFi	✓	✓	✓	✓
4G	✓	✗	✓	✓

Solution comparison

The solutions provided by other vendors are relatively expensive because they require hardware of the same brand and additional network installation costs.



NeuronIII solution is suitable for household and commercial scenarios, with diversity hardware interfaces, comprehensive software functions, support for multiple communication protocols, and easy integration with other devices. It provides a more cost-effective solution.

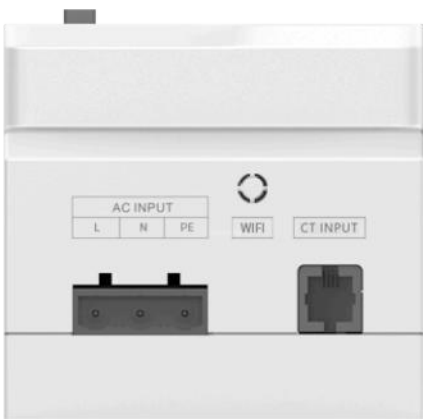
Neuron III Lite

A residential-grade anti-tripping controller with integrated meter



- With electric meter
- Real-time maximum charging current control
- Support power line communication,WiFi,Bluetooth

Hardware interfaces



NeuronIII(N3)-Lite Top-view



NeuronIII(N3)-Lite Bottom-view

Product Specifications

Product Model	Neuron III-Lite
Configuration	
MCU	Xtensa dual-core 32-bit LX6 microprocessor
Bluetooth, WiFi	2.4 GHz WiFi, Bluetooth V4.2 BR/EDR and Bluetooth LE standards
PLC	Supports P1901.1 and OFDM/FSK modulation.
Power monitoring	Supports voltage, current, and power monitoring.
Button	Current setting button *1, RESET button *1
LED	6 monochrome LEDs (green), 1 RGB LED
Interface	
Power interface	Single-phase alternating current
CT ring interface	1-way CT ring input interface
Power supply	
Rated voltage	230V
Input frequency	50Hz
Overall power consumption	≤20W
Installation method	Rail mounting
Environmental requir	
Relative humidity	25%~85%, No condensation
Operating temperature	-25°C~55°C
Storage humidity	≤85%
Dimension	
Size	72 x 100 x 70 mm(2.834 x 3.937 x 2.756 in)

ATP III-AC EV Charger



- Plug and charge
- Intelligent time-sharing charging
- Multiple installation options, offering high flexibility

Model	ATPIII 6507W	ATPIII 6511W	ATPIII 6521W
Charging Type	Charging Mode 3 Case B & Case C		
Outlet Options	AC Type 2 (IEC 62196-2)		
Input/ Output Current rating	32A, single phase	16A, three phase	32A, three phase
Input/ Output Power rating	Up to 7.7 kW	Up to 11.5 kW	Up to 23 kW
Input/ Output voltage	220-240VAC	380-415VAC	380-415VAC
Input Frequency	50 Hz or 60 Hz		
Number of EV Served	Up to 1		
Cable Length	5.0 m, Optional: 7.5m		
Distribution Systems	TN		
Connector Type	1P+N+PE	3P+N+PE	3P+N+PE
Protection	Overcurrent, overvoltage, undervoltage,ground fault,Residual current protection(TypeA+DC6mA), Over-temperature protection		
Overvoltage Category	Type II		
Energy Metering	NO		
Cellular Communication	NO		

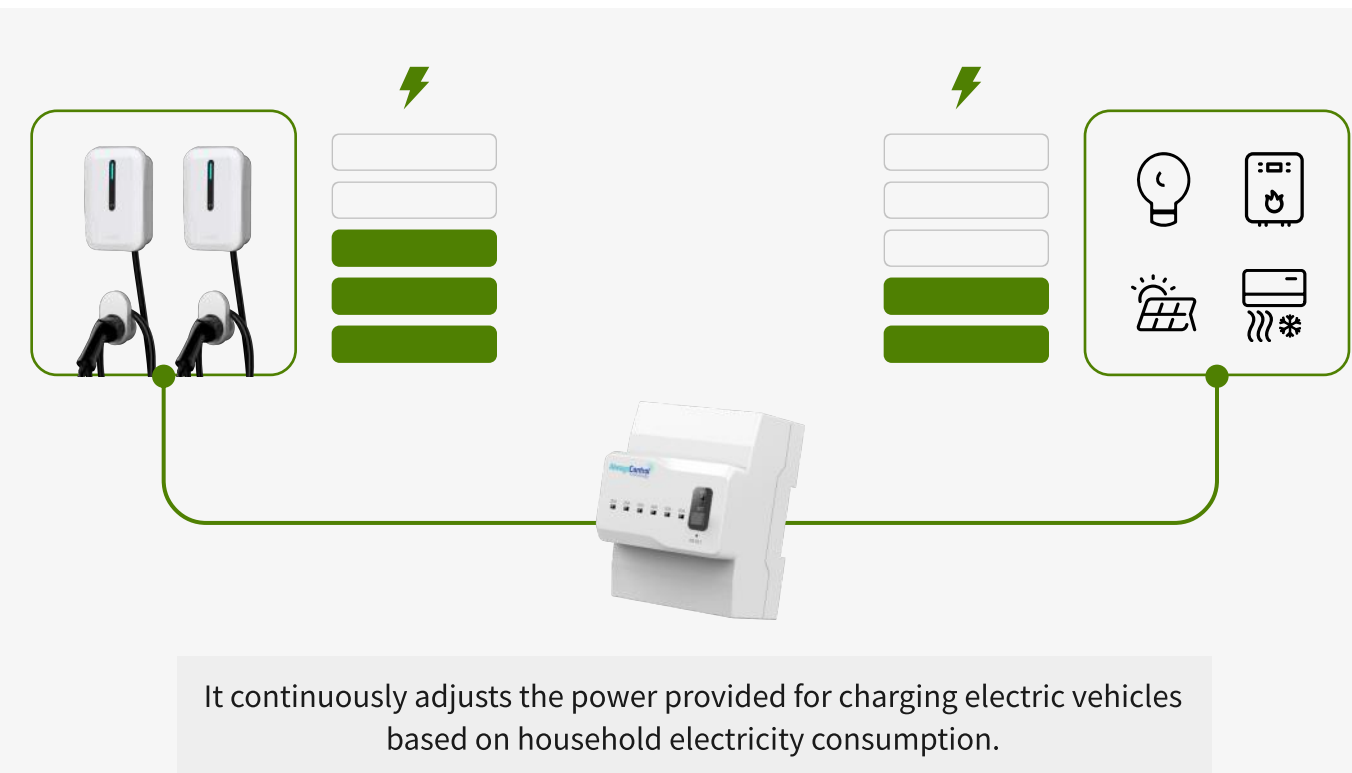
Product Specifications



Model	ATP III
User in interface	
Connectivity	Standard: PLC; Optional: Wi-Fi/Bluetooth/USB/Flash/RTC/DIP switch
User Authentication	Plug & Play /APP
Status Indication	Colored status indicator
RFID Reader	NO
Emergency Button	NO
Configuration	
Software Upgrade	Over-the-air (OTA)
Language System	English, Chinese
General characteristics	
Protection Rating	IP65 and IK10 (Enclosure)
Housing Material	Plastic PC
Operational Altitude	Up to 2000 m
Operating Temperature	-35 °C to +50 °C
Starage Temperature	-40 °C to +80 °C
Humidity	< 95%, non-condensing
Mounting	Wall-mount or pedestal stand
Dimensions (D x W x H)	73×190×269
Net Weight (kgs)	2.9
Compliance Standards	
Codes and Standards	IEC 61851-21-2, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12, IEC 61008-1, IEC 61008-2-1, EN 62423, IEC 62196-1, IEC 62196-2
Safety Standards	IEC 61851-1, IEC 61851-21-2, IEC 62196-1, IEC 62196-2

Meet household needs

Providing them with simple remote control to charge their electric vehicles and optimize their energy costs without compromising their comfort.



Single-family residential charging

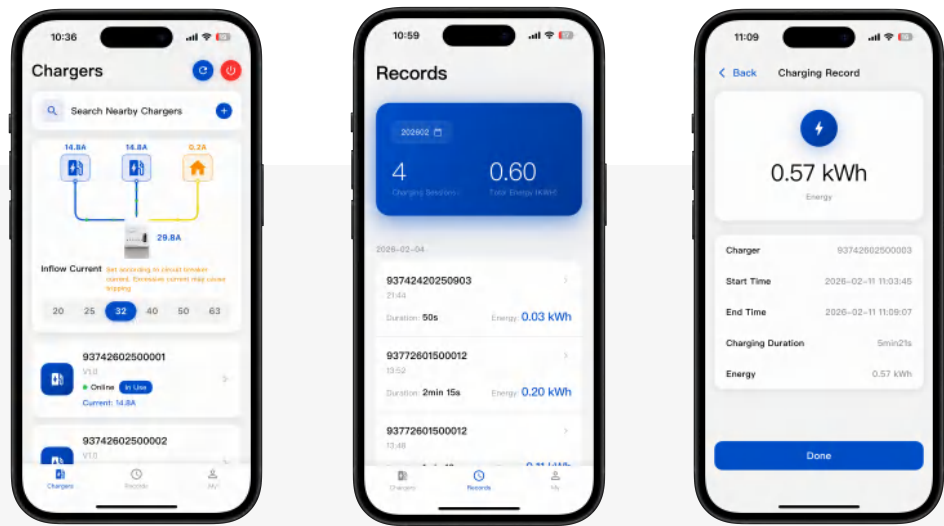


- Anti-tripping module with power load management
- Leverages Dynamic Load Management (DLM) to automatically balance loads, intelligently adjusting charging power to accommodate household usage peaks.

Feature:

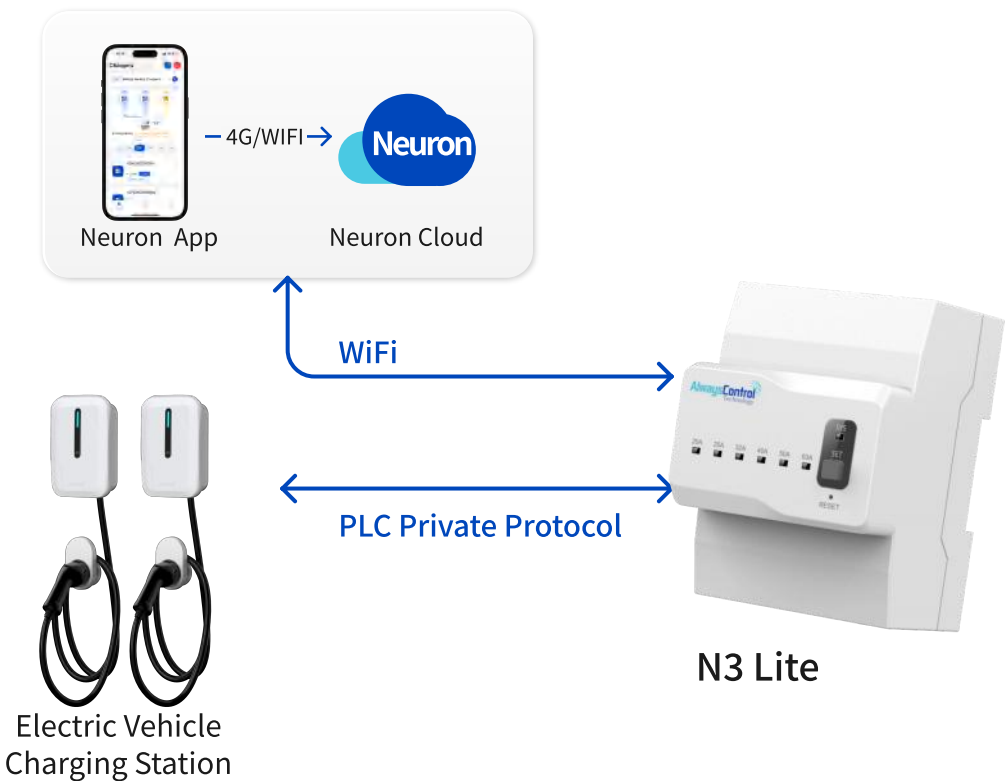
- Applicable to 1-phase EV chargers
- Power Line Communication (PLC)

Our mobile app

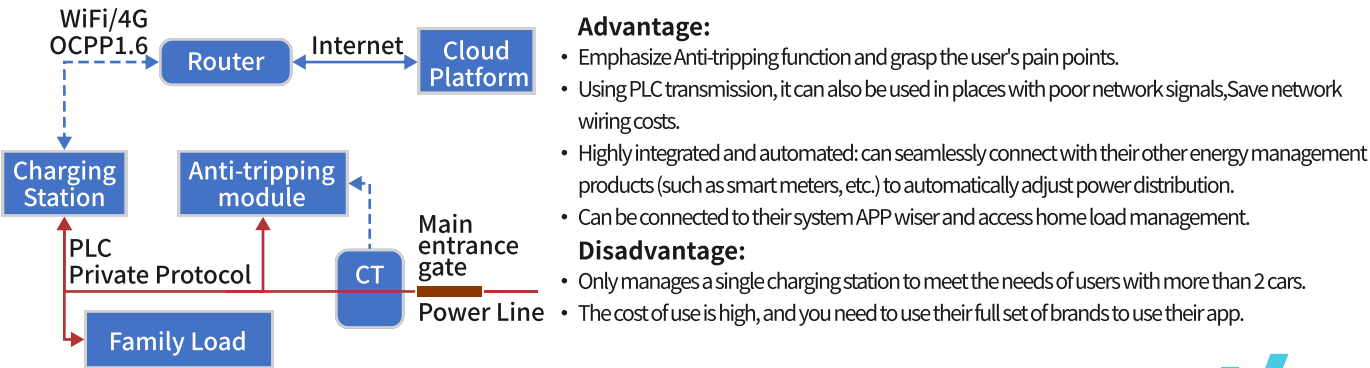


- Real-time Monitoring
- EV Charger Management
- Charging History & Energy Tracking
- Supports **DLM** (dynamic load management) to achieve "anti-tripping" function
- Remote OTA Firmware Updates

Architecture diagram

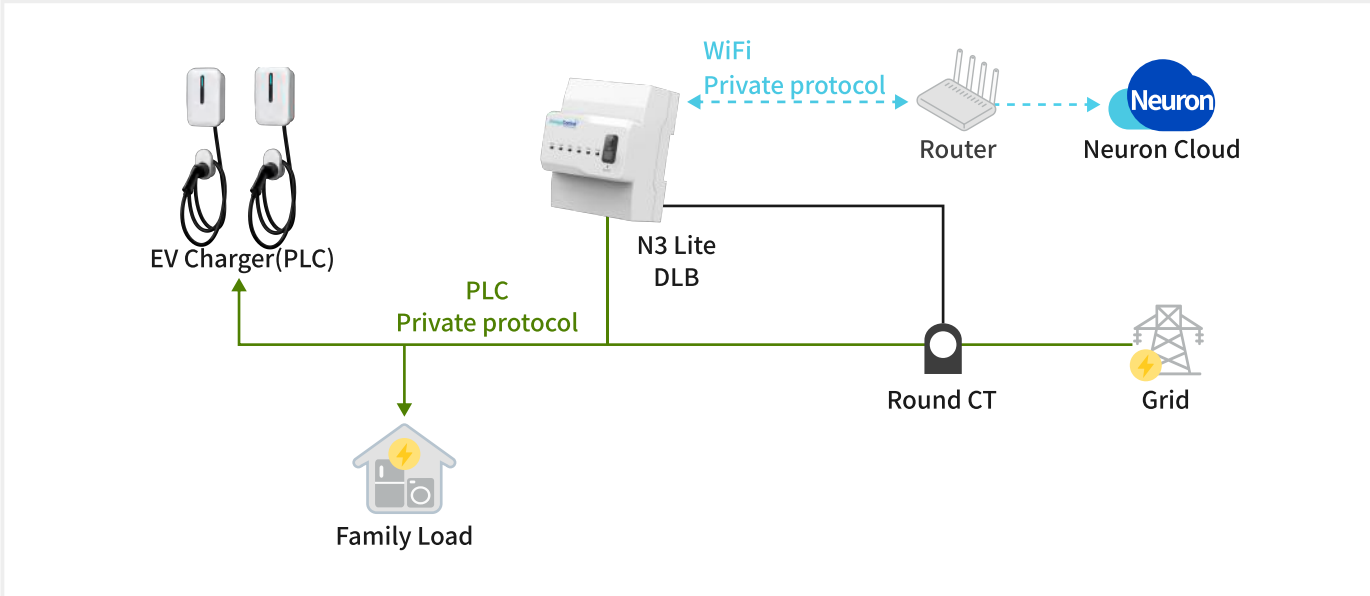


Residential solutions from other company

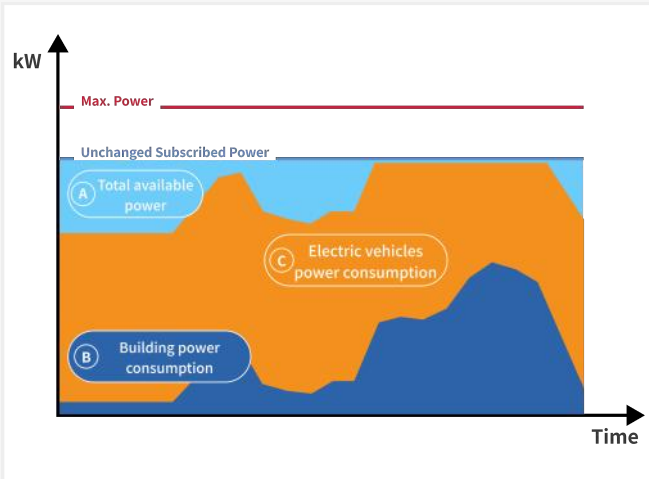


Our Residential solutions

Architecture



Dynamic load management



Package

Set A: **One** Neuron III Lite and **One** ATP III



No.	Product Name	Quantity
1	Neuron III Lite Terminal Controller	1
2	Quick Start Guide	1
3	Warranty Card	1
4	3Pin AC Power Input Terminal	1
5	Split Core CT Loop (Standard 100A, Cable Length 100cm)	1
6	ATP III Series(Please refer to the Spec Sheet)	1
7	5m Charging Cable	1
8	Cable Organizer	1

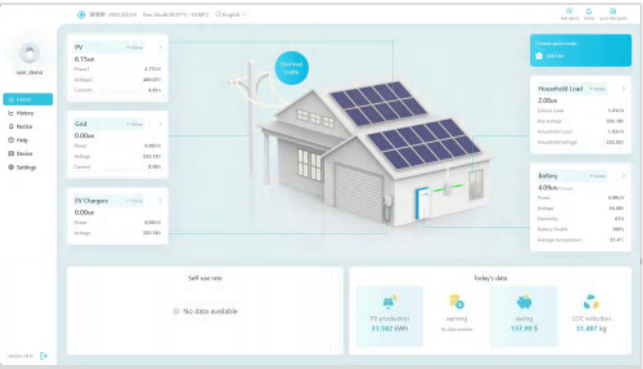
Set B: **One** Neuron III Lite and **Two** ATP III's

No.	Product Name	Quantity
1	Neuron III Lite Terminal Controller	1
2	Quick Start Guide	1
3	Warranty Card	1
4	3Pin AC Power Input Terminal	1
5	Split Core CT Loop (Standard 100A, Cable Length 100cm)	1
6	ATP III Series(Please refer to the Spec Sheet)	2
7	5m Charging Cable	2
8	Cable Organizer	2



Neuron Cloud-Home energy management system (HEMS)

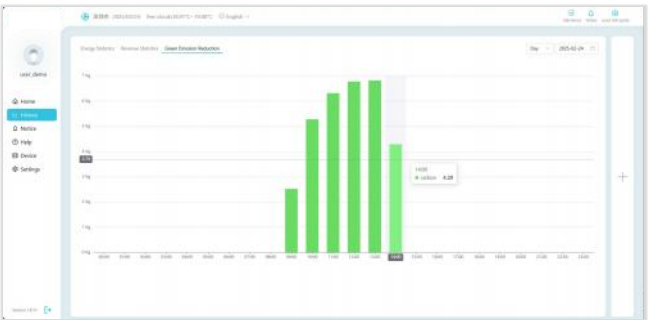
Real-time energy flow



One-click switch between three basic modes

1. Self-use mode: maximize the use of photovoltaic power supply.
2. Economic mode: adjust the system power consumption logic according to the electricity bill to save electricity bills.
3. Emergency mode: This mode will give priority to fully charging the battery, and prepare for power outages.

Historical data



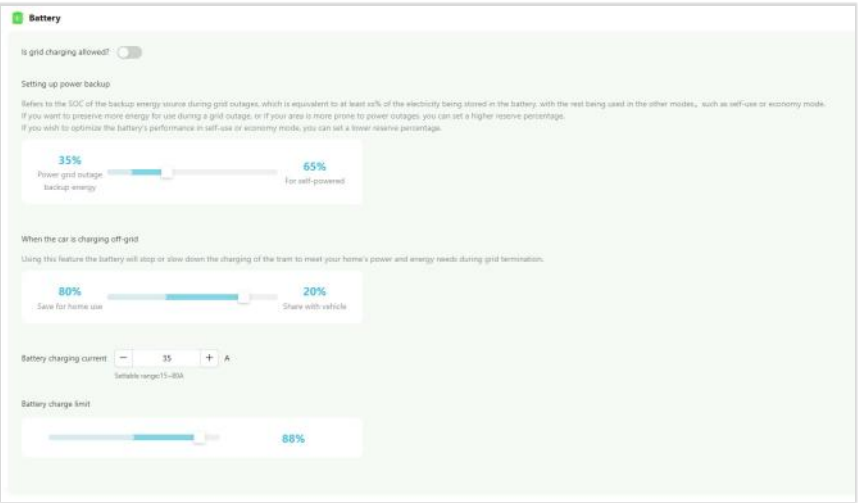
A single chart presents the integrated data of each device, which helps users understand their power generation/consumption more intuitively.

Mode Settings



Grid electricity price setting.

Battery status detailed settings



- Support local and cloud mode .
- Device collaboration types can be expanded to support products of different brands.
- Single chart presents the integration of various devices.
- Multi-device data statistical analysis, supporting photovoltaic inverters,charging station, energy storage batteries, smart meters data integration and collaboration.

Residential scenario application function list

Initial setting	Network setting, time zone, style, account settings, terminal binding, device binding
Real-time monitoring	Real-time system energy flow and real-time power status (spontaneous generation and consumption rate, real-time power, electricity consumption
Statistics	Energy data statistics and integrated analysis, energy-saving benefit analysis, green energy-saving analysis, data export, view addition operations
Setting	General settings (system self-generation, emergency, economic mode settings, electricity price settings, etc.), Equipment advanced settings (detailed settings)
Device Management	Modify equipment, start and stop equipment
Message Notification	Equipment alarm information, user personalized suggestions, upgrade notifications, etc.
Other Services	Beginner's guide, remote update, FAQ, energy saving prediction



Microgrid scenario solutions

Improve energy efficiency and reduce electricity costs

System architecture

Cloud-to-Cloud interconnection supported

Easily connect different cloud platforms
Seamlessly connect data and functions

Fault alarm classification management supported

Automatically classify and manage fault alarms
Allows you to locate and solve problems quickly

Carbon emission monitoring

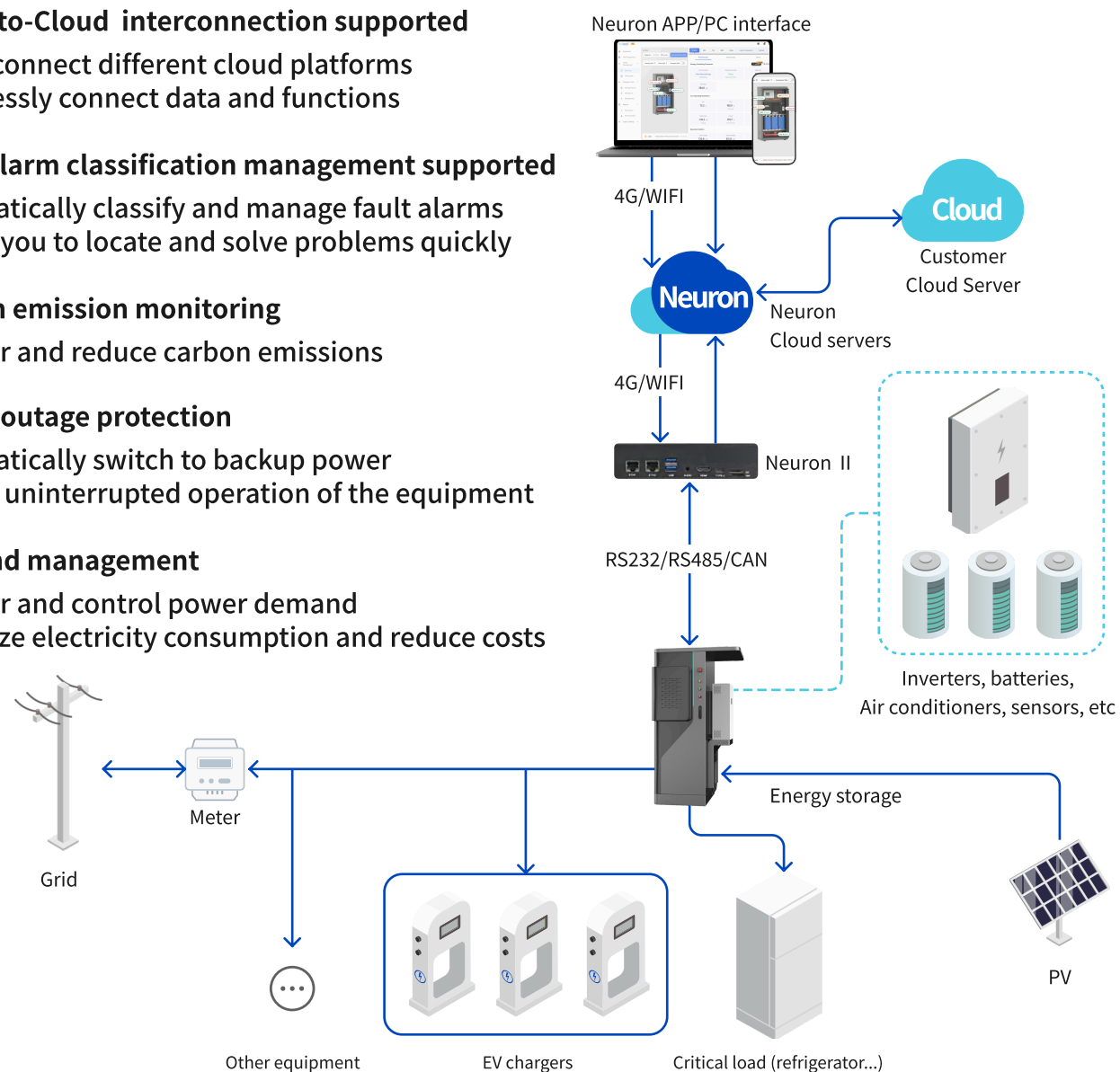
Monitor and reduce carbon emissions

Power outage protection

Automatically switch to backup power
Ensure uninterrupted operation of the equipment

Demand management

Monitor and control power demand
Optimize electricity consumption and reduce costs



Energy storage solutions specifically designed for commercial and industrial sites.

Application examples

Energy storage system in shenzhen



The low-voltage photovoltaic storage cabinet energy management system solution developed for telecommunications operators aims to uniformly monitor and manage thousands of discrete photovoltaic storage cabinets.

Access device

Photovoltaic and energy storage integrated cabinet (PCS, battery, UPS, fire protection, access control, alarm, flooding, lighting, air conditioning).

Difficulty of the case

Build a customized cloud platform in 5 days, complete cross-brand equipment access to distributed energy storage remote debugging and control within 10 days, and improve equipment anti-interference capabilities.

Features

Distributed energy storage, peak shaving and valley filling, emergency power backup mode.

Energy storage system in dongguan



Develop customized high/low voltage photovoltaic storage cabinet energy management system solutions for customers.

Difficulty Description

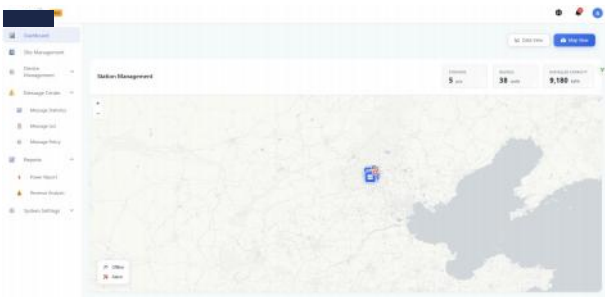
Modular access equipment requirements (Customers require that equipment in the cabinet, such as battery packs/photovoltaic inverters/air conditioners, etc., can be replaced in a modular manner regardless of brand, so that more equipment suppliers can access the cabinet platform).

Customers can customize the user interface at any time, making it convenient for users to adjust the interface according to their needs.

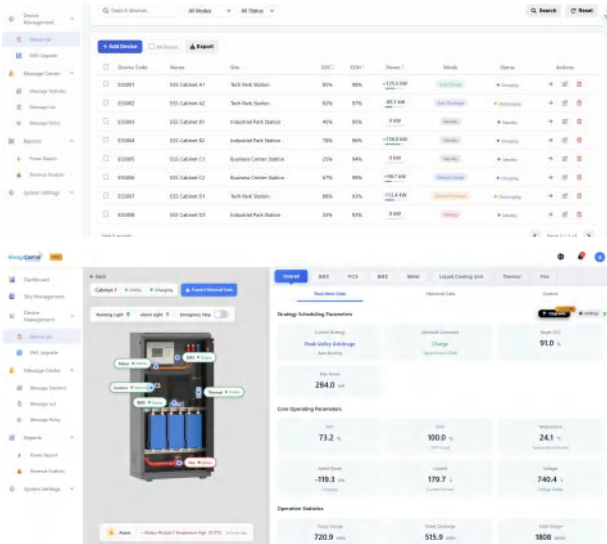
Neuron Cloud-Energy storage management system (ESS)

Distribution map: Distributed management

The geographic distribution of devices is displayed through the map visualization, and the device location can be located in real time, which is convenient for users to [troubleshoot distributed device faults](#)



Real-time monitoring: Efficient O&M



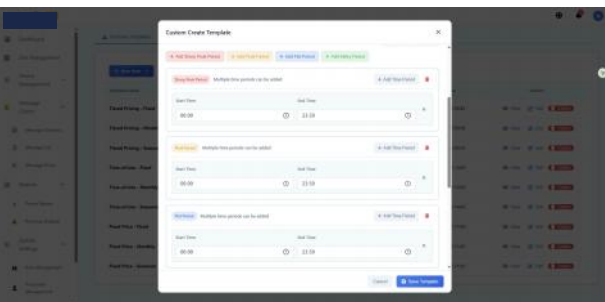
It can remotely collect and analyze the power data of the power station (PCS, BMS, electricity meter, fire protection, access control, sensing and other data connected to all integrated cabinets), power generation details, electricity consumption details, energy storage charging and discharging details, etc., and provide functions such as equipment binding, operation status monitoring, configuration management, etc., to realize the full life cycle management of [equipment and solve the pain points of low operation and maintenance efficiency and high operating costs](#)

Mode setting: Flexible switching

Peak shaving and valley filling: According to the electricity price configuration and combined with the peak shaving and valley filling power consumption strategy, the time-of-use electricity price strategy is flexibly set to optimize energy efficiency, [improve economic benefits, and save costs for owners](#)



Emergency backup power: The emergency backup mode of the energy storage cabinet has the advantages of fast switching, stable power supply and efficient use of energy. When the power grid is out of power or the voltage is unstable, the energy storage cabinet can switch to the standby state in milliseconds, giving priority to ensuring the power supply of key loads, isolating the grid fault, and providing stable voltage and frequency.



Data Center: Data Analytics



Centralized display of equipment operation data, including historical data statistics, trend analysis, revenue evaluation, etc., [to optimize the owner's operation decisions](#)

List of cloud platform features

Initialize the configuration	4G networking, account setup, adding terminals, devices
Distribution map	View device layout, quantity, and status
Real-time monitoring	It can remotely collect and analyze the power data of the power station (PCS, BMS, electricity meter, fire protection, etc. connected to all integrated cabinets, access control, sensing and other data), power generation details, electricity consumption details, energy storage charging and discharging details, etc
Data Centers	Analyze data: Provide energy efficiency analysis and historical data reports (year-on-year, month-on-month, system operation data, system Power quality, system benefits, etc.), initial data: A history of real-time detection data
Policy management	Setting up the access equipment of the integrated cabinet and the system setting of the integrated cabinet (peak shaving and valley filling, backup mode)
Electricity price configuration	Electricity price plan operation setting (time setting of buying and selling electricity price)
Permissions management	Operations such as organization permissions, member permissions, and role permissions
Alarm management	Alarm records, alarm configurations, etc
Other services	Log management, remote updates, and more

Intelligent remote management, completely subverting traditional operation and maintenance!

Remote debugging
Equipment problems can be solved remotely, reducing the manual operation and maintenance workload by more than 50%.

24/7 real-time monitoring
The equipment operation status, power data, and environmental information are all at hand, allowing you to accurately control the power quality.

AI Intelligent Management
Automatically identify anomalies, predict equipment failures, and provide early warnings to avoid losses.

Neuron smart energy management system combines hardware + cloud platform to provide comprehensive power quality monitoring and intelligent maintenance functions. Through AI data analysis + remote intelligent operation and maintenance, it helps enterprises reduce operation and maintenance costs, improve equipment stability, and achieve high-efficiency management.

OTA seamless upgrade
Remote software upgrades keep the system running optimally without on-site maintenance.

Power data analysis
Identify harmonic issues, optimize power quality, and reduce excess energy costs.



Customer scenario case



Hospital Data Center

Challenge

- Harmonic interference in the power supply system may cause abnormal medical equipment and endanger patient safety.
- The traditional operation and maintenance mode cannot monitor the power supply quality in real time and is prone to sudden failures.

Neuron Solutions

- Real-time monitoring of power quality, accurate analysis of harmonic components, and automatic optimization of power factor.
- Remote AI management ensures stable power supply and prevents medical equipment from being affected.
- Result: 0 failures of medical equipment, ensuring that critical medical services are not affected by power supply problems!



Remote Area Projects

Challenge

- In places like steel mills, industrial power supplies such as APF and SVG are widely used for power quality compensation. Drastic load changes cause system voltage, frequency and other variables to fluctuate more easily, affecting the compensation effect of the industry.
- The power supply system frequently shuts down due to power fluctuations, seriously affecting business operations.

Neuron Solutions

- Real-time remote acquisition of detailed microsecond data on site, and targeted analysis based on this.
- Remote monitoring of power grid status, early warning of equipment abnormalities, and ensuring system stability.
- Result: While reducing the number of after-sales personnel's attendance, the software update and performance index improvement of on-site industrial power supply are achieved!



A large industrial park

Challenge

- The power supply conditions vary greatly over time and space, making it difficult to optimize the power supply system. The scattered space and time also make it more difficult to maintain this type of power supply, and the response to customer needs is often delayed.

Neuron Solutions

- Through Neuron, the core of the mobile power supply can be optimized at any time by combining spatiotemporal big data.
- Combined with remote data, the external environment of the mobile power supply system, such as space and time, can be analyzed, and early warning can be issued when necessary, so that power supply manufacturers can intervene in their products in advance through the Neuron platform.



Remote Area Energy Projects

Challenge

- The equipment is located in a remote area, and the maintenance cost is high. The repair cost for each failure is as high as 500,000 yuan per month.
- The load power of the mine oil field is large, and production is often carried out late at night to avoid the peak power consumption period. However, such a time arrangement makes it very inconvenient to troubleshoot the power supply equipment on site, which greatly affects the after-sales work efficiency and work enthusiasm of the power supply manufacturer.

Neuron Solutions

- Through real-time monitoring, fault data recording and other methods, the fault condition can be accurately reproduced.
- Neuron provides remote online reading and OTA functions, so that R&D can be built on the customer site, which is more targeted and efficient.
- Result: Harmonics are reduced by 90%, saving 1 million yuan in electricity bills each year!

Neuron Cloud-Power Quality Monitoring System (PQMS)

Map Distribution

This function is not available, and distribution information cannot be obtained.

Before using our Cloud Platform

The map distribution function helps users quickly locate abnormal equipment and improve operation and maintenance efficiency by visualizing the operating status (normal/abnormal) and distribution of equipment in each area in real time. At the same time, the platform combines hierarchical management and statistical data to provide managers with accurate regional power quality monitoring and decision support.



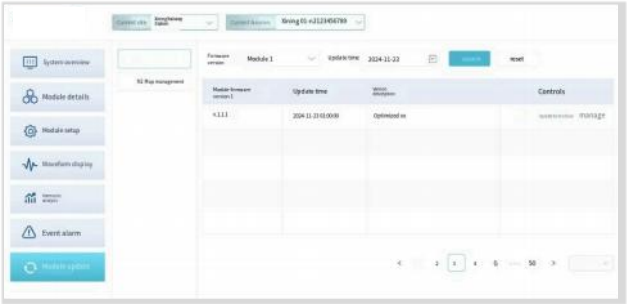
After using our Cloud Platform

Remote OTA

Without this function, external personnel can only update on site

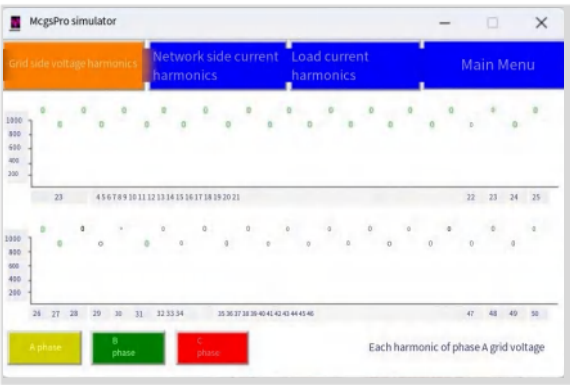
Before using our Cloud Platform

The advantage of remote upgrade technology (OTA) is that it greatly improves equipment maintenance efficiency and user experience. Through OTA, users can remotely update device firmware or software without on-site operation, significantly saving manpower and time costs. At the same time, OTA supports batch upgrades and real-time monitoring to ensure the efficiency and reliability of simultaneous updates of multiple devices. It can also quickly fix software vulnerabilities, optimize system performance, or add new features to extend the life cycle of the device.



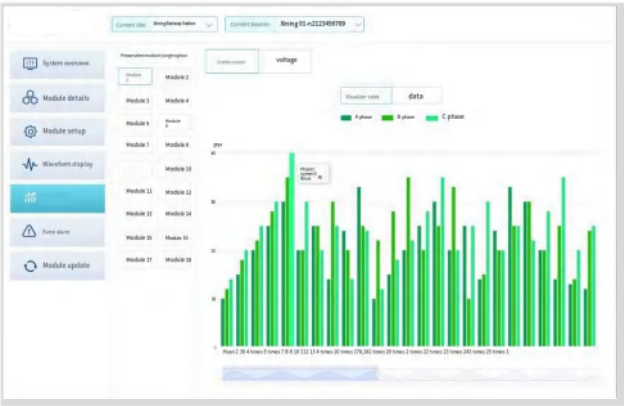
After using our Cloud Platform

Harmonic analysis



Before using our Cloud Platform

The harmonic analysis function can monitor and analyze the harmonic components in the power system in real time, helping users to accurately identify harmonic sources and evaluate their impact on equipment and systems. Through intuitive data display and graphical waveform display, users can quickly understand the harmonic distribution, find abnormalities and optimize power quality in a timely manner.



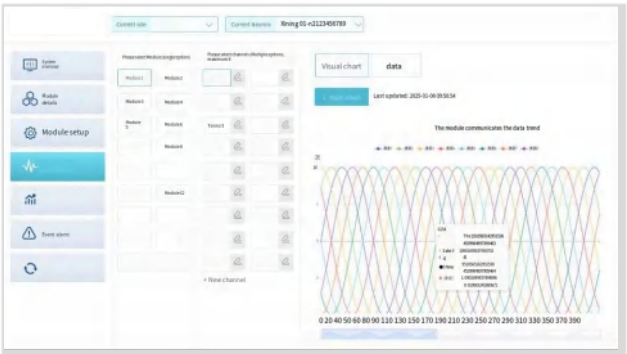
After using our Cloud Platform

Multi-module, multi-channel setup and comparison

Without this function, only single module settings can be made

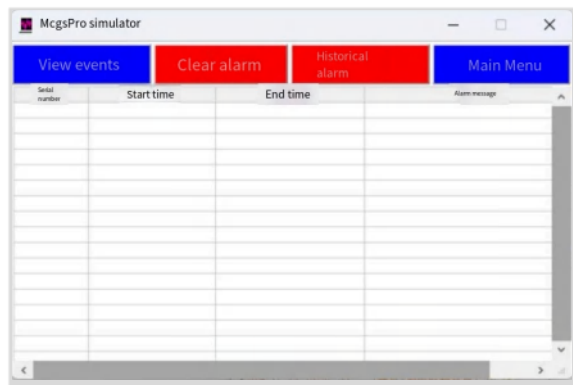
Before using our Cloud Platform

The multi-module, multi-channel setting and comparison functions meet the needs of different application scenarios through flexible configuration and fine control. Users can freely adjust the parameters of multiple modules and channels, such as CT ratio, compensation mode and limit ratio, to achieve precise control of total current, reactive power and harmonics, and improve power quality. The intuitive parameter comparison interface and one-key save function simplify the operation process, reduce setting conflicts, and improve operation and maintenance efficiency. At the same time, the modular design is easy to expand and supports the coordinated operation of multiple devices, providing users with efficient and reliable solutions.

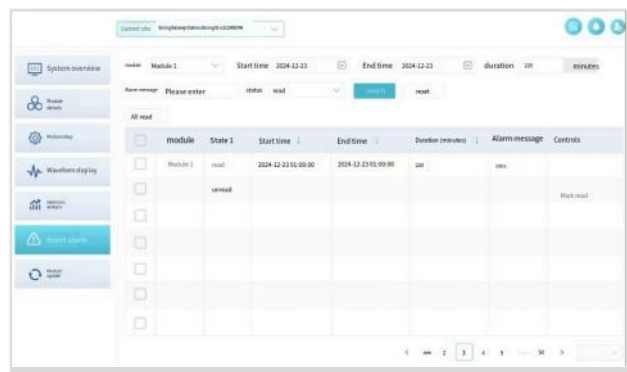


After using our Cloud Platform

Alarm function



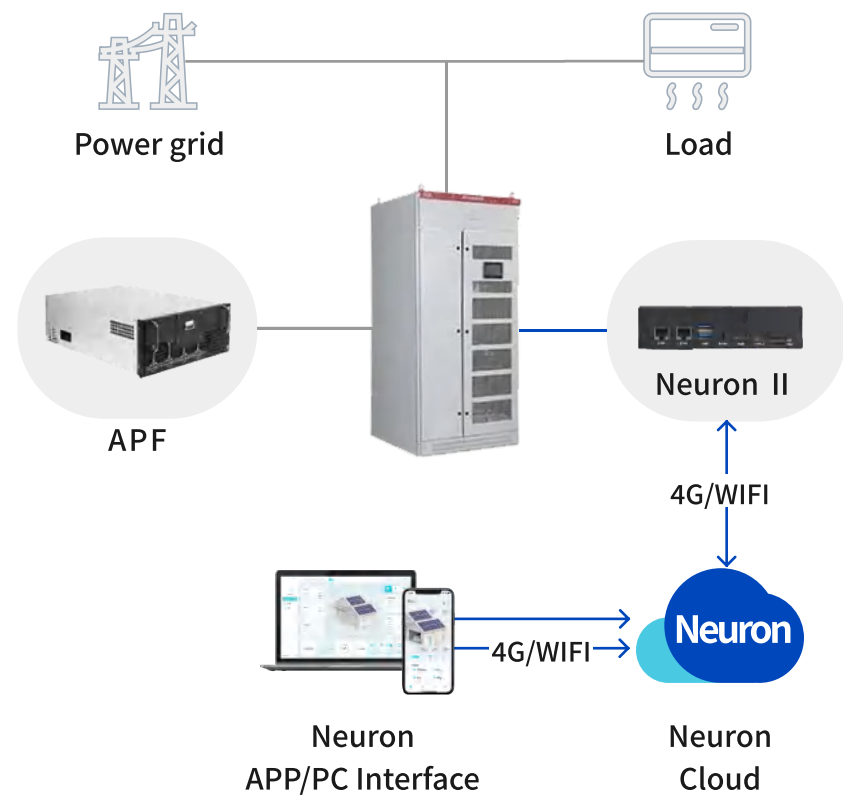
Before using our Cloud Platform



After using our Cloud Platform

The event alarm function can monitor the operating status of the equipment in real time, identify anomalies and provide alarm information to ensure that the operation and maintenance personnel can respond and handle them quickly. Through precise screening and query, it supports retrieval by module, time, status and other conditions to improve data retrieval efficiency, and provides status tracking function to ensure that all alarms receive timely attention. Combining waveform analysis and harmonic analysis, more intuitive fault diagnosis can be achieved, and OTA remote upgrades can reduce on-site maintenance costs and improve operation and maintenance efficiency.

System architecture diagram



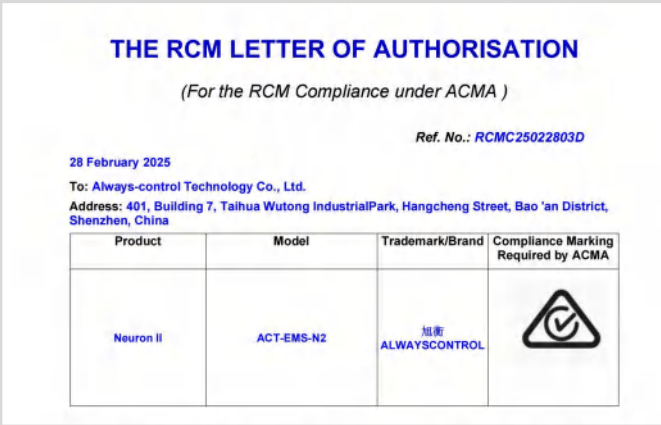
Cloud Platform Function List	
Initial configuration	4G networking, account settings, adding terminals and devices
Home Map	View equipment layout, quantity and status
Module Details	Display real-time data of power modules including voltage, current, compensation current, grid power factor and other important information
Module Settings	Set the limit ratio and current for each power module
Waveform display	Display module data in the form of visual charts and lists
Harmonic analysis	Using AI algorithms to analyze the harmonic components of power systems
Event Alert	Display and notify alarm
Module Updates	Remotely update the power module
Other features	Online readings
	Fault recording
	Remote debugging
	High-speed data storage at the microsecond/millisecond level (slow data storage at the second/level level has limited value in the power industry)

Certificate

CE



RCM



Software copyright

