# Energy Storage Management System (ECO-EMS)

## Brief

The ECO-EMS series products are integrated EMS designed for ESS scenarios, enabling real-time monitoring to meet the requirements of comprehensive operation monitoring, ensuring the safe, reliable, and cost-effective operation of ESS. Adopting an integrated architecture design, the system is suitable for user-side ESS, microgrid and PV-plus ESS and more. It ensures that the system operates optimally at all times, maximizing overall benefits and shortening ROI.

## Features



#### Smart O&M

Support 4G network access to achieve intelligent O&M both on site and cloud.



#### Stable and Reliable

Bus monitoring and bus wake-up, support the parallel operation of up to 10 integrated units, auto-networking, mutual backup operation between APP and nodes.



#### Diverse Integration

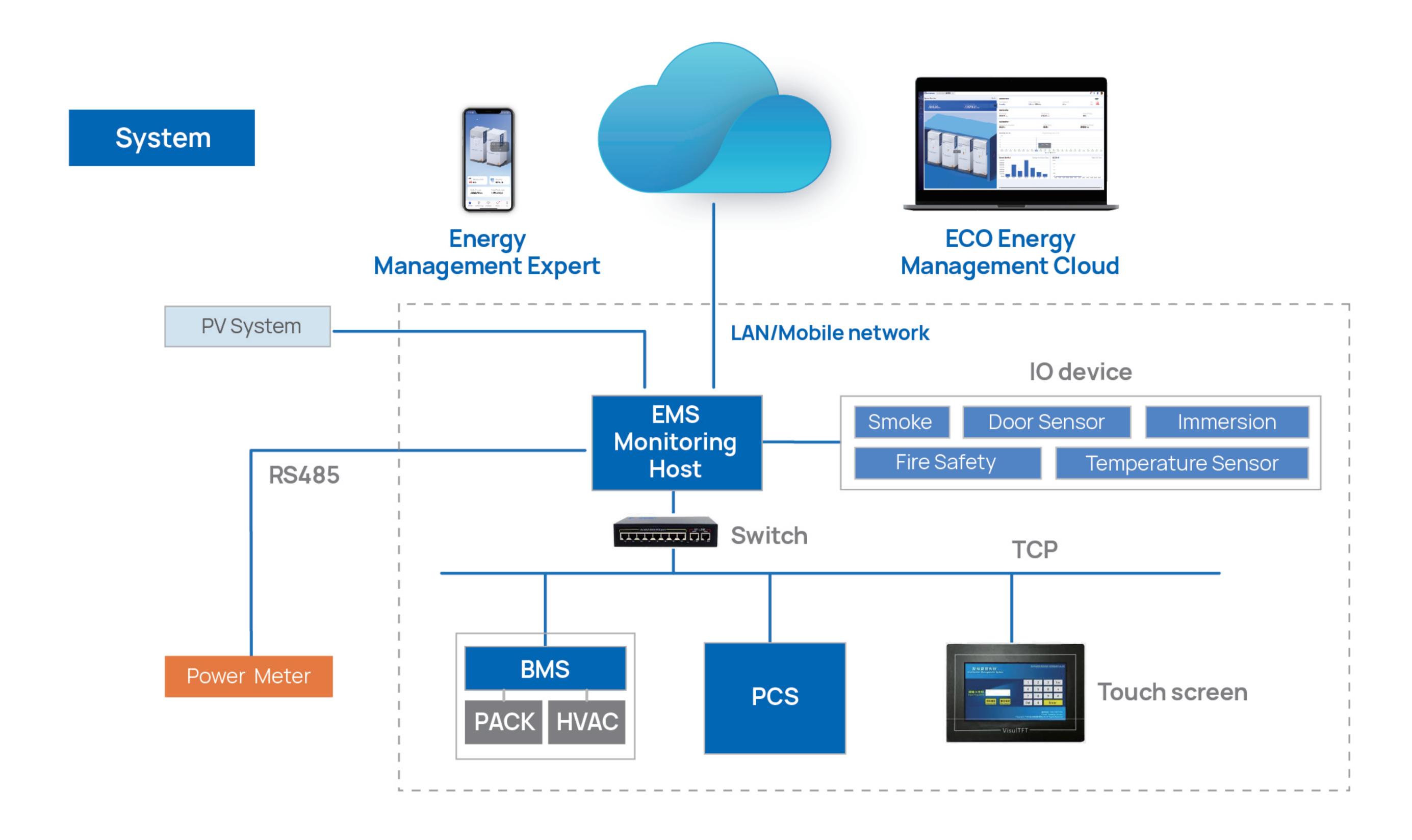
Support real-time power control, load tracking, demand management, and charge/discharge planning strategies, integrate with distributed power generation equipment, support coordination control of PV-ESS, and distributed consumption and other operation modes.



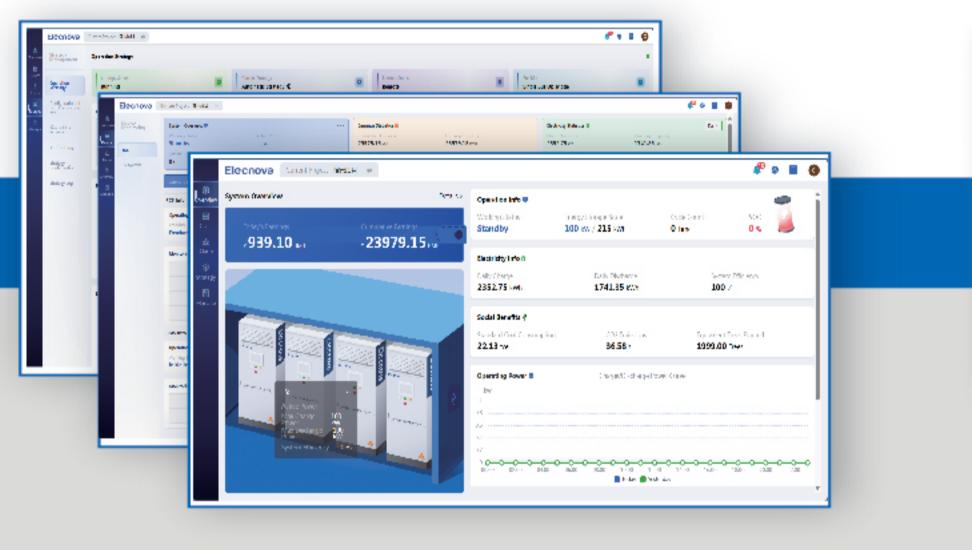
#### Self-adaptive Operation

Flexible arrangement of single-/dual-bus during parallel operation, identify the bus operation mode to achieve adaptive operation of multiple units, ensuring the safety of line operation.

## Elecnova



#### **Functions**







#### System Monitoring

Real-time monitoring of the operating status of PCS, BMS, air conditioning, access control, fire protection equipment, smoke sensors, immersion sensors, temperature and humidity sensors, and other devices.



#### Intelligent Alarms

Various notification methods, help customers quickly address operational abnormalities and ensure reliable system operation.



#### Peak Shaving

Adapt charge and discharge strategies to achieve energy arbitrage.



#### **Demand Management**

Smooth the electricity load through charge and discharge strategies, reduce peak power & maximum demand, and lower the customer's electricity cost.



#### Time Shifting

Intelligent prediction of new energy generation, maximizing the self-consumption utilisation of PV and reducing customer electricity costs.



### | Remote O&M

Remote fault diagnosis and maintenance, reducing equipment downtime and safety risks, improving operation efficiency, and reducing maintenance costs, ensuring system stability.



#### SOH Analysis

Collect data such as cell voltage, total current, SOC, and accurately assesses the battery's health status based on cloud.



#### **PV-ESS Coordination**

Accurately predict electricity loads and intelligently control the output of PV generation and ESS, improving power supply reliability.