Monet Series

Outdoor Cabinet Energy Storage System

SPECIFICATION

1. Product Introduction

1.1. Model Description

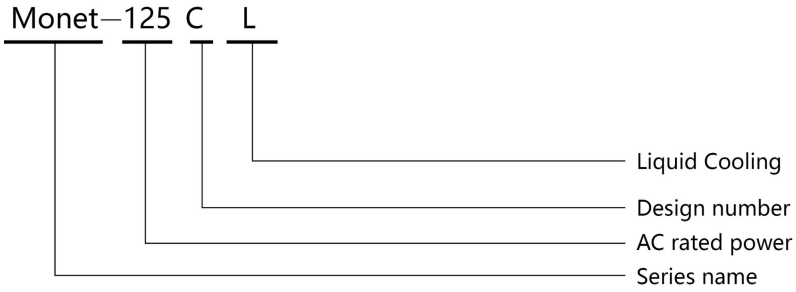


Figure 1-1Model identification

1.2. Product Function

The Monet series outdoor energy storage cabinet integrates energy storage batteries, modular PCS, energy management monitoring system, power distribution system, environmental control system, and fire control system. It adopts modular PCS for easy maintenance and expansion. The outdoor cabinet adopts front maintenance to reduce the occupied area and maintenance channel. It has the characteristics of safe and reliable operation, fast deployment, low cost, high energy efficiency, and intelligent management.

The operating strategy of the energy storage system in common application scenarios is as follows:

Peak shaving and valley filling:

- When the time-of-use tariff is at its valley segment: The energy storage cabinet automatically charges, and then remains idle after full charging; When the time-of-use tariff is at its peak segment: The energy storage cabinet automatically discharges, realizing the arbitrage of price difference and improving the economic efficiency of the photovoltaic-energy storage-charging system.

Photovoltaic-energy storage integration:

- Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage; When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.

1.3. Electrical Wiring Diagram

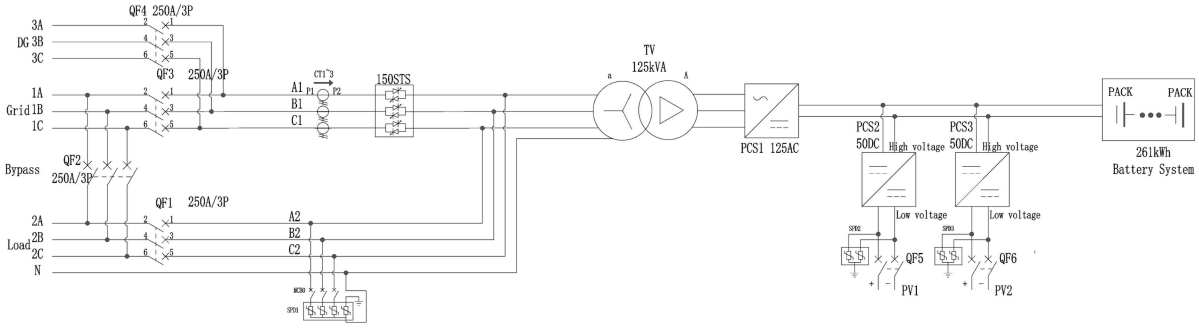


Figure 1-3 Electrical Wiring Diagram

Description:

- **The system scheme with grid-connected and off-grid capabilities, isolated transformer, and photovoltaic input has different wiring configurations for different projects, and the actual wiring may vary slightly. Actual wiring should be based on the drawings provided with the product shipment.**

1.4. Product Features

- System productization, integrating liquid-cooled batteries, PCS and power distribution, temperature control and fire protection, monitoring and communication, to fully control the system's operating status and risks.
- Patented outdoor cabinet protection design, optimized cooling air ducts, protection from sand, dust and rain; front and rear doors open for maintenance, which facilitates side-by-side arrangement of multiple systems on site and reduces floor space.
- Configuration of rack-modular PCS, support for multiple parallel connection, good scalability; according to the system capacity requirements of micro-grid and other scenarios to select the number of PCS modules and total battery power.
- Protection level IP55, able to perfectly cope with all types of outdoor weather.

- Intelligent liquid cooling temperature control system, reducing the temperature difference between the cells inside the PACK, guaranteeing the consistency of battery temperature control, improving battery life and reducing energy consumption.

1.5. Product Parameters

The following are typical configuration parameters of the Monet series outdoor cabinet-type photovoltaic-energy storage system. Actual delivery shall be subject to the technical agreement.

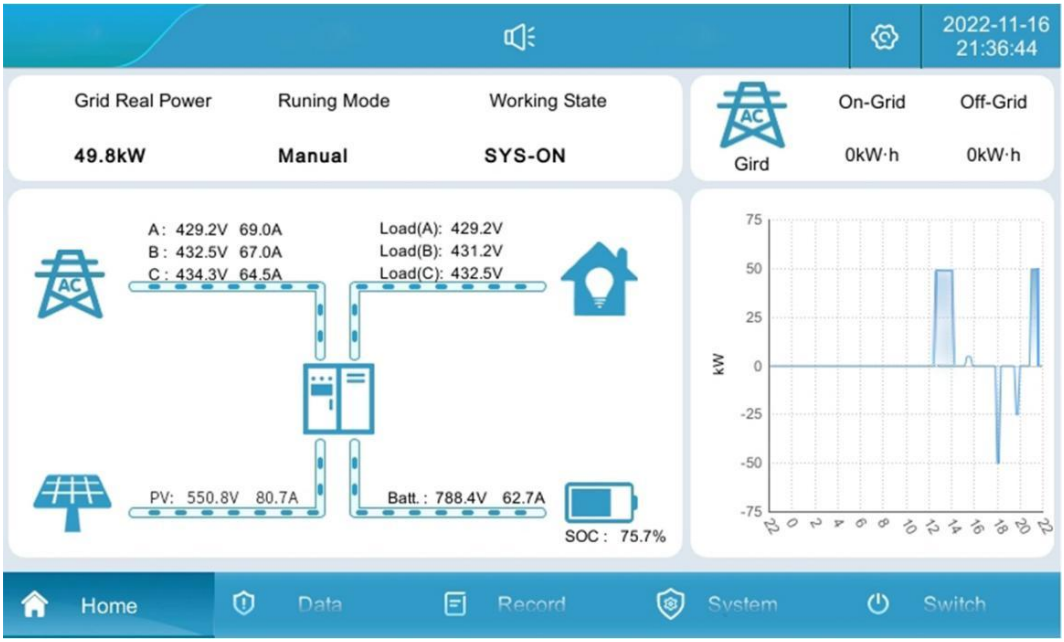
Table 1-1 Energy Storage System Parameter Sheet

Model	***Monet-125CL***
Sub-Model	***125TS(DC100)(261kWh)***
Battery Parameters	
Battery rated capacity	*261kWh*
Battery rated voltage	*832V*
Battery voltage range	*728V~936V*
Battery type	*LFP*
Battery cell capacity	*1P*52S*5S*
Cell Capacity	*314Ah*
Max.charging/discharging power	*0.5P*
Max.charge/discharge current	*157A*
Photovoltaic Parameters	
Rated power	*100kW*
PV Voltage Range	*250~500V (MPPT)*
PV Max. Current	*160A*2*
MPPT quantity	*2*
AC Parameters	
Rated AC power	*125kW*
Rated AC current	*180A*
Rated AC voltage	*400V，3W+N+PE*
Rated AC frequency	*50/60Hz*
THDi	*< 3 (Rated power)*
Power Factor	*-1leading to+1 lagging*
THDv	*<3% (linear load)*
General Parameters	
Protection level	*IP55*
Protection level	*I*
Isolation mode	*Isolation transformer*
Shutdown self-discharge	*< 0.1% Rated power (Without transformer)*
Display	*LCD*
Relative humidity	*0 ~ 95% (No condensation)*

Noise	*< 78dB*
Ambient temperature	*-25℃ to +60℃(Derating above 45℃)*
Cooling mode	*Liquid-cooled*
Altitude	*3000m(> 2000m derating)*
Communication interface	*CAN/Ethernet / 485*
*Dimension (W * D * H)*	*1600*1350*2300mm*
Weight (approx.)	*3330kg*

1.6. Human-machine Interface Introduction

The home page interface displays real-time power, voltage, current, generated energy, operation mode, working status and other information of the system.



1.7. Appearance Diagram