

Monet Series

Outdoor Cabinet ESS For PV Storage & Charging

SPECIFICATION



1. Product Introduction

1.1. Model Description

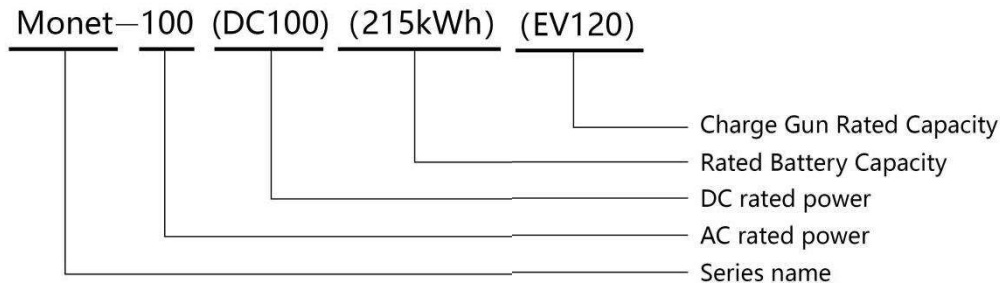


Figure1-1 Model identification



Description:

- **The DC power module are optional components, and the rated output power and battery capacity can be flexibly configured according to project requirements.**

1.2. Product Function

Monet series Outdoor Cabinet ESS For PV Storage & Charging integrates energy storage battery, modular PCS, DC Charging module, energy management monitoring system, power distribution system, environmental control system and fire control system. Adopting modularized PCS, it is easy to maintain and expand capacity, and the outdoor cabinet adopts front maintenance, which can reduce the floor space and maintenance access, and is characterized by safety and reliability, rapid deployment, low cost, high energy efficiency and intelligent management.

The operation strategies of the optical storage and charging system under common application scenarios are as follows:

Peak shaving and valley filling:

- when the time-sharing tariff is in the valley: the energy storage cabinet automatically charges and stands by after being filled; when the time-sharing tariff is in the peak: the energy storage cabinet automatically discharges, realizing the arbitrage of the tariff difference, and improving the economic benefits of the optical storage charging system.

Combined PV storage & charging :

- During the day, the photovoltaic power is directly supplied to the charging pile, and the excess power is stored in the energy storage system. At night or when the light is insufficient, the energy storage system supplements the power supply to achieve 24-hour uninterrupted power supply.

1.3. Electrical Wiring Diagram

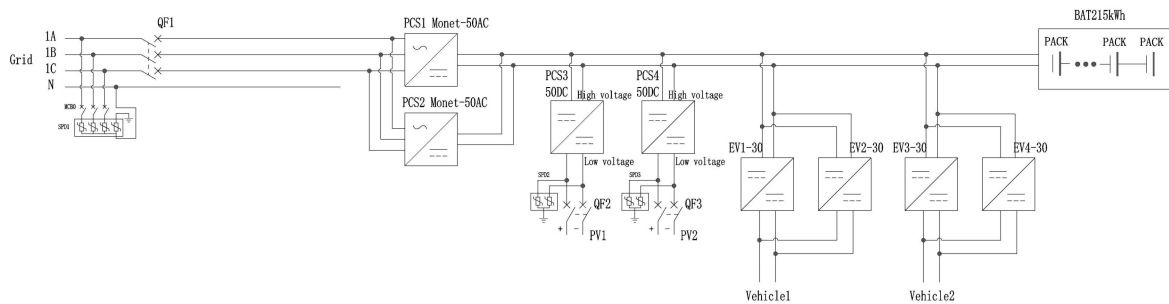


Figure1-2 Electrical Primary Diagram



Description:

- The pure grid-connected system scheme is different for different projects, and the circuit is slightly different. The actual one should be subject to the attached drawing of the shipment.

1.4. Product Features

- Highly integrated: Highly integrated multiple systems such as energy storage battery, modular PCS, DC Charging module, and energy management monitoring system into one, reducing footprint and improving system efficiency.
- Photovoltaic charging environmental protection: make full use of solar energy resources to maximize the use of clean energy and self-sufficiency.
- Compatible with a wide range of vehicles: wide range of constant power to meet the power requirements of both low-voltage charging for small vehicles and high-voltage charging for buses.
- One machine with multiple guns: the dual-gun model is designed for independent communication between the two charging circuits, which is simple and reliable; it

supports simultaneous charging of two vehicles, which improves the utilization efficiency of the charging pile.

- Multiple charging modes: supports multiple charging modes such as charging by time, charging by power, charging by amount, automatic full, etc. to meet the charging needs of different users.
- Intelligent control: through the advanced energy management monitoring system, intelligent scheduling and control is realized to optimize energy utilization and improve system economy.

1.5. Product Parameters

The following are typical configuration parameters of the Monet series Outdoor Cabinet ESS For PV Storage & Charging system. Actual delivery shall be subject to the technical agreement.

Table1-1 Outdoor Cabinet ESS For PV Storage & Charging Parameters

<i>Model</i>	<i>Monet-100 (DC100) (215kWh) (EV120)</i>
<i>Grid port</i>	
<i>Rated AC power</i>	<i>100kW</i>
<i>Max.AC power</i>	<i>110kW</i>
<i>Rated current</i>	<i>144A</i>
<i>Max.current</i>	<i>158A</i>
<i>Rated voltage</i>	<i>400Vac, 3W+PE</i>
<i>Rated frequency</i>	<i>50/60Hz (±5Hz)</i>
<i>PV port</i>	
<i>Max.PV input voltage</i>	<i>Minimum battery voltage -30V</i>
<i>PV input power</i>	<i>100kW</i>
<i>MPPT channels</i>	<i>1/2/4</i>
<i>Battery port</i>	
<i>Battery rated capacity</i>	<i>215kWh</i>
<i>Battery rated voltage</i>	<i>768V</i>
<i>Battery voltage range</i>	<i>672V~864V</i>
<i>Battery type</i>	<i>Lithium iron phosphate battery (LFP)</i>
<i>Battery cell capacity</i>	<i>280Ah</i>
<i>Series of Battery</i>	<i>1P*20S*12S</i>
<i>Maximum charge and discharge current</i>	<i>140A</i>
<i>Charging port</i>	
<i>Rated input power</i>	<i>60kW*2</i>
<i>Rated input current</i>	<i>120A*2 (500Vdc)</i>
<i>Measurement accuracy</i>	<i>< ±0.1%</i>
<i>Number of Charging Guns</i>	<i>2</i>

<i>Gunline length</i>	<i>5m</i>
<i>Activation method</i>	<i>Scanning, swiping, APP</i>
<i>Charging method</i>	<i>Auto-fill, by amount, by power, by time</i>
<i>Display Mode</i>	<i>LED</i>
General Parameters	
<i>Cooling mode</i>	<i>Air cooling</i>
<i>Degree of protection</i>	<i>IP55</i>
<i>Shutdown self-discharge</i>	<i>< 0.1%Rated power (Without transformer)</i>
<i>Relative humidity</i>	<i>0 ~ 95% (no condensation)</i>
<i>Noise</i>	<i>< 75dB</i>
<i>Ambient temperature</i>	<i>-25°C to +60°C(with derating at temperatures above 45°C)</i>
<i>Altitude</i>	<i>3000m (> 2000m reduction)</i>
<i>Display</i>	<i>LCD</i>
<i>BMS Communication</i>	<i>CAN</i>
<i>EMS Communication</i>	<i>Ethernet / 485</i>
<i>Emergency stop protection</i>	<i>Equipped with emergency stop button, with emergency stop protection function</i>
<i>Protection features</i>	<i>Input over-under-voltage protection, input over-current protection, anti-surge protection, output short-circuit protection, over-temperature protection, anti-backflooding protection, battery active protection, emergency shutdown and other protection functions.</i>
<i>Size (W * D * H)</i>	<i>1800*1200*2300mm</i>
<i>Weight (approx.)</i>	<i>2500kg</i>

1.6. Appearance Diagram

