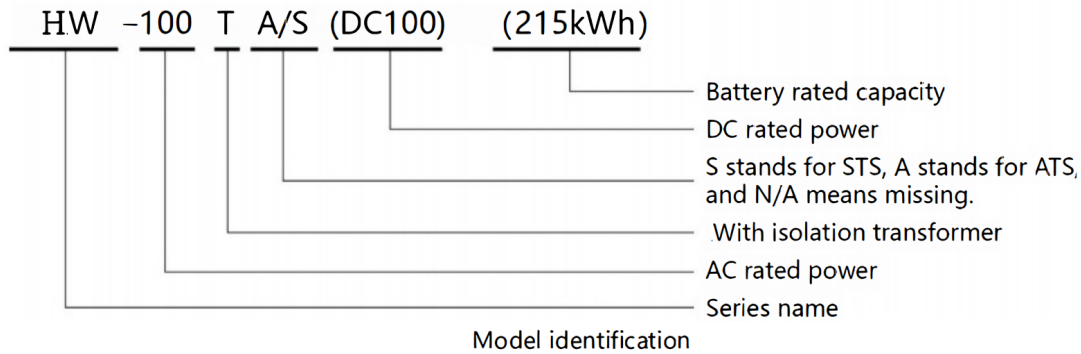


1. Product Introduction

1.1. Model Description



Description:

- The isolation transformer, A/S, and 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

The HW 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:

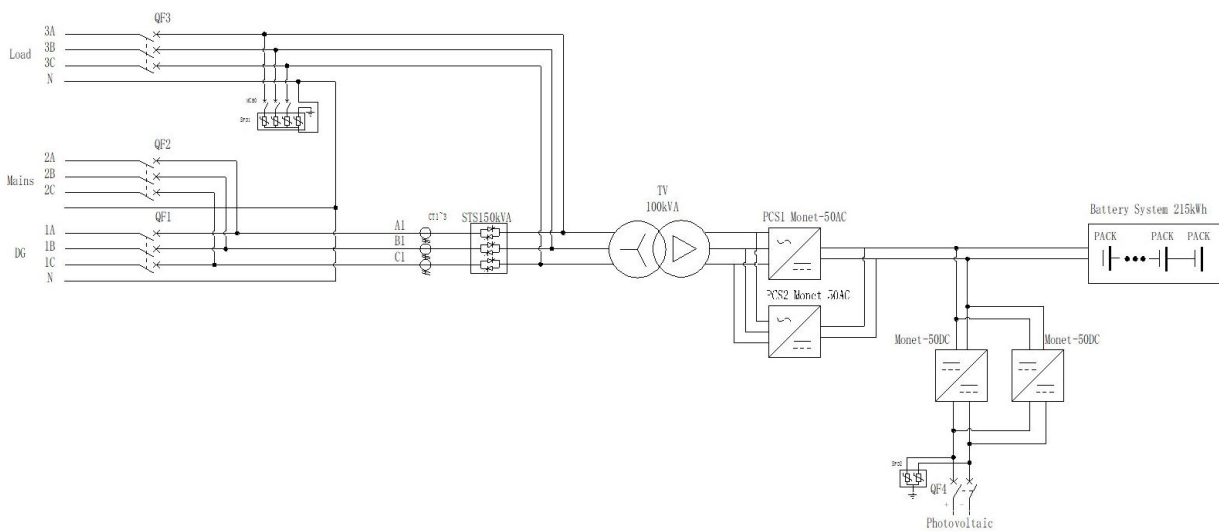
- When the time-of-use tariff is at its valley segment: The energy storage cabinet automatically charges, and then remains idle after full charging; When the time-of-use tariff is at its peak segment: The energy storage cabinet automatically discharges,

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



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

- The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.
- 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.

- The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.
- It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.
- The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

1.5. Product Parameters

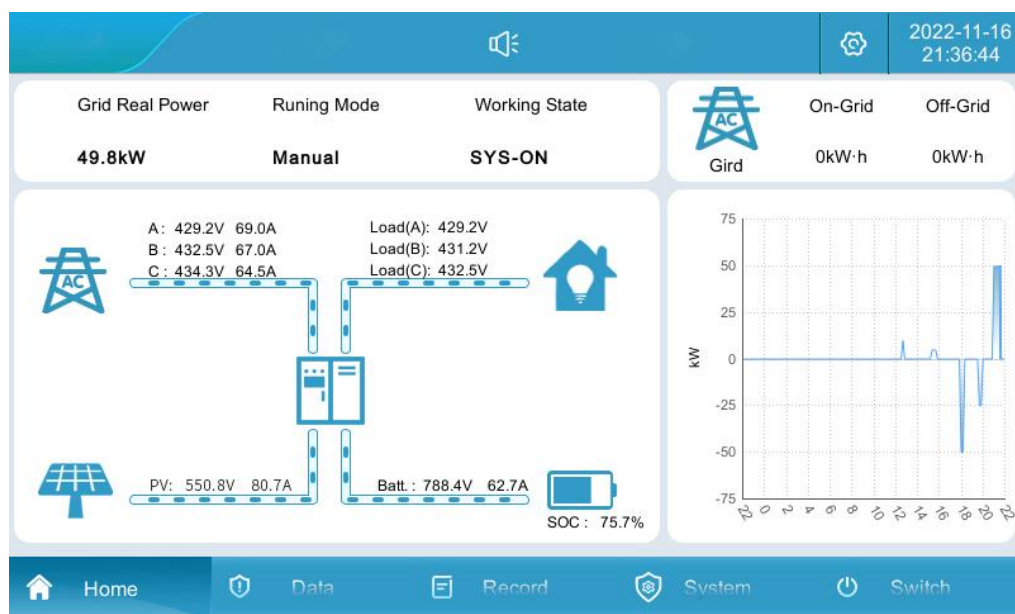
The following are typical configuration parameters of the HW series outdoor cabinet-type photovoltaic-energy storage system. Actual delivery shall be subject to the technical agreement.

<i>Model</i>	<i>HW-100TS (DC100) (215kWh)</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>Photovoltaic rated capacity</i>	<i>100kW</i>
<i>Photovoltaic voltage range</i>	<i>200~450V</i>
<i>Rated AC power</i>	<i>100kW</i>
<i>Rated AC current</i>	<i>144A</i>
<i>Rated AC voltage</i>	<i>400V, 3W+N+PE/3W+PE</i>
<i>Rated AC frequency</i>	<i>50/60Hz</i>
<i>THDI</i>	<i>< 3% (Rated power)</i>
<i>Power Factor</i>	<i>-1leading to+1 lagging</i>
<i>THDU</i>	<i>< 3% (Linear Load)</i>
<i>Protection level</i>	<i>IP54</i>
<i>Protection level</i>	<i>I</i>
<i>Isolation mode</i>	<i>No-Isolation(Adding isolation transformer is optional)</i>
<i>Shutdown self-discharge</i>	<i>< 100W (Without transformer)</i>
<i>Display</i>	<i>LCD</i>
<i>Relative humidity</i>	<i>0 ~ 95% (no condensation)</i>

Noise	< 78dB
Ambient temperature	-25°C to +60°C(with derating at temperatures above 45°C)
Cooling mode	Intelligent air-cooled
Altitude	3000m (> 3000m reduction)
Communication interface	CAN/Ethernet / 485
Size (W * D * H)	1800*1200*2300mm
Weight (approx.)	3100kg

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

