

# Monet Series

## Solar&Energy Storage System

### SPECIFICATION



# 1. Product Introduction

## 1.1. Model Description

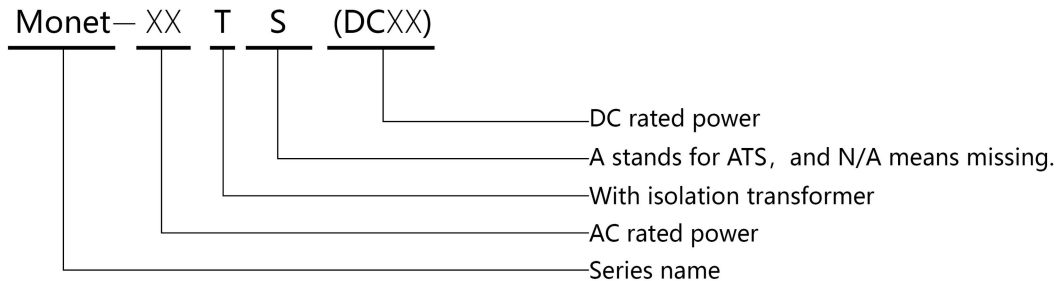


Figure 1-1 Model identification

For example: Monet-50TS(DC50) represents an Solar&Energy Storage System with 50 AC power module , isolation transformer, STS, and 50 DC power module.



### Description:

- The isolation transformer, 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 Monet Series Solar&Energy Storage System integrates modular PCS, local energy management monitoring system, power distribution system, environmental control system, etc. The use of modular PCS facilitates maintenance and expansion; front maintenance can reduce floor space and maintenance access; it is characterized by safety, reliability, rapid deployment, low cost, high energy efficiency, and intelligent management.

Under common application scenarios, the operation strategy is as follows:

### On-Grid Mode:

- The Monet Series Solar&Energy Storage System connects batteries, photovoltaic systems, or other DC sources and converts them into AC power through AC/DC power modules before integrating them into the grid. This allows for the following: 1. The connection of

energy storage batteries enables peak shaving and valley filling, generating arbitrage profits through electricity price differences. 2. Connecting photovoltaic power generation to the grid allows for profit through the sale of electricity.

### Off-Grid Mode:

- The Monet Series Solar&Energy Storage System connects batteries, photovoltaic systems, or other DC sources and converts them into AC power through AC/DC power modules to supply local loads. The default three-phase voltage is 400Vac, 50Hz.

## 1.3. Electrical Wiring Diagram

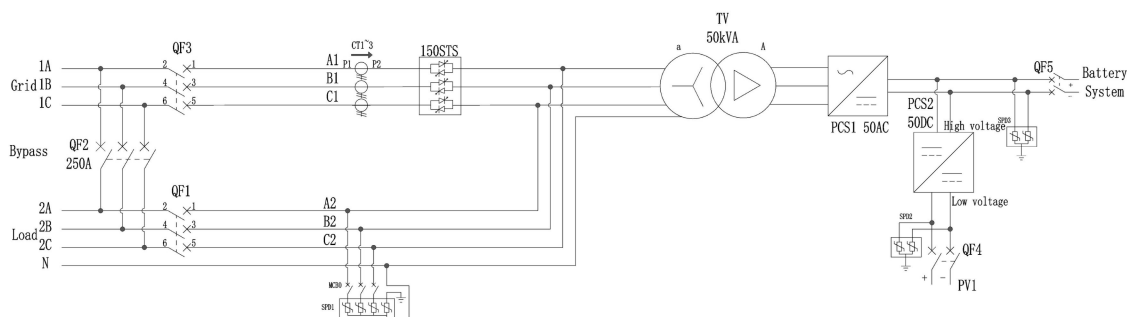


Figure 1-2 Monet-50TS(DC50) Electrical Primary Diagram

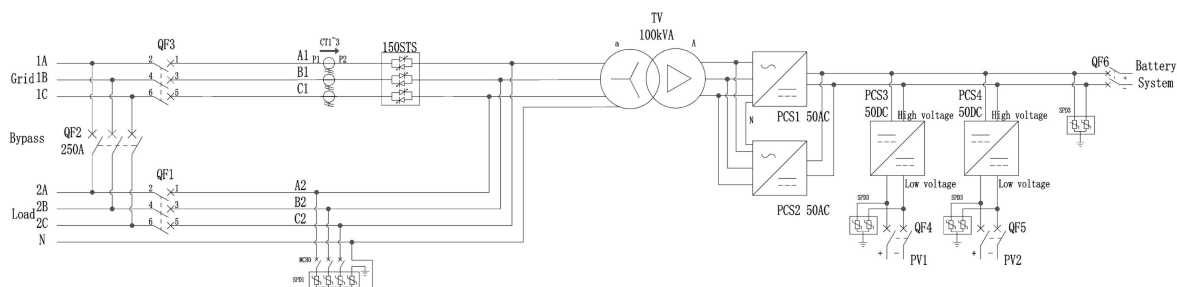


Figure 1-3 Monet-100TS(DC100) Electrical Primary Diagram

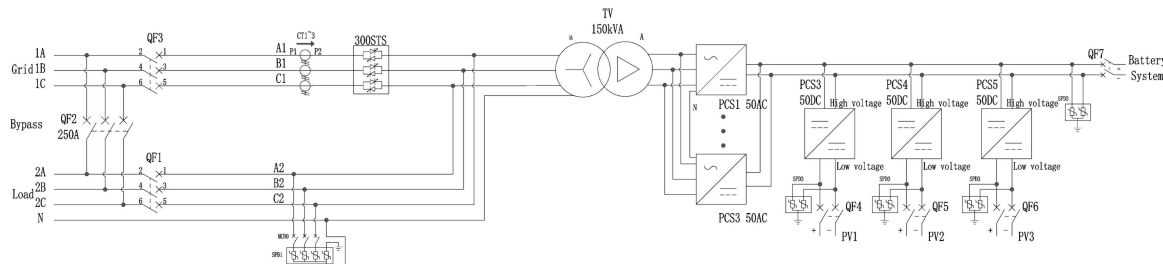


Figure 1-4 Monet-150TS(DC150) Electrical Primary Diagram



**Description:**

- The system solution includes grid-connected and off-grid modes, isolation transformers, and photovoltaic inputs. Configurations may vary depending on the project, and the wiring may differ slightly. The actual wiring should be based on the accompanying drawings provided with the shipment.

## 1.4. Product Features

The Monet series Solar&Energy Storage System adopt advanced digital control technology and are equipped with the independently developed Lotus-Pcs microgrid management system, which optimizes control performance and improves system reliability to meet the needs of multiple application scenarios. Its performance characteristics are as follows:

- There are two types of cabinets for indoor and outdoor use, meeting the needs of various installation sites.
- Modular rack design, with flexible configuration, convenient expansion and maintenance.
- Three-level circuit design of the power module, with high conversion efficiency and improved power utilization.
- The local control panel can realize various functions such as converter operation monitoring, energy management strategy development, and remote equipment upgrading.

## 1.5. Product Parameters

The following are the typical configuration parameters of the Monet series of integrated Solar&Energy Storage System. The actual supply shall be subject to the technical agreement.

Table 1-1 Solar&Energy Storage System Parameters

<b>Model</b>	<b>Monet-50TS (DC50)</b>	<b>Monet-100TS (DC100)</b>	<b>Monet-150TS (D150)</b>
<b>Grid port</b>			
<i>Rated power</i>	<i>50kW</i>	<i>100kW</i>	<i>150kW</i>
<i>Max.power</i>	<i>55kW</i>	<i>110kW</i>	<i>175kW</i>
<i>Rated current</i>	<i>72A</i>	<i>144A</i>	<i>216A</i>
<i>Max.current</i>	<i>79A</i>	<i>160A</i>	<i>240A</i>
<i>Rated voltage</i>	<i>400Vac, 3W+N+PE</i>	<i>400Vac, 3W+N+PE</i>	<i>400Vac, 3W+N+PE</i>
<i>Rated frequency</i>	<i>50/60Hz</i>	<i>50/60Hz (±5Hz)</i>	<i>50/60Hz (±5Hz)</i>

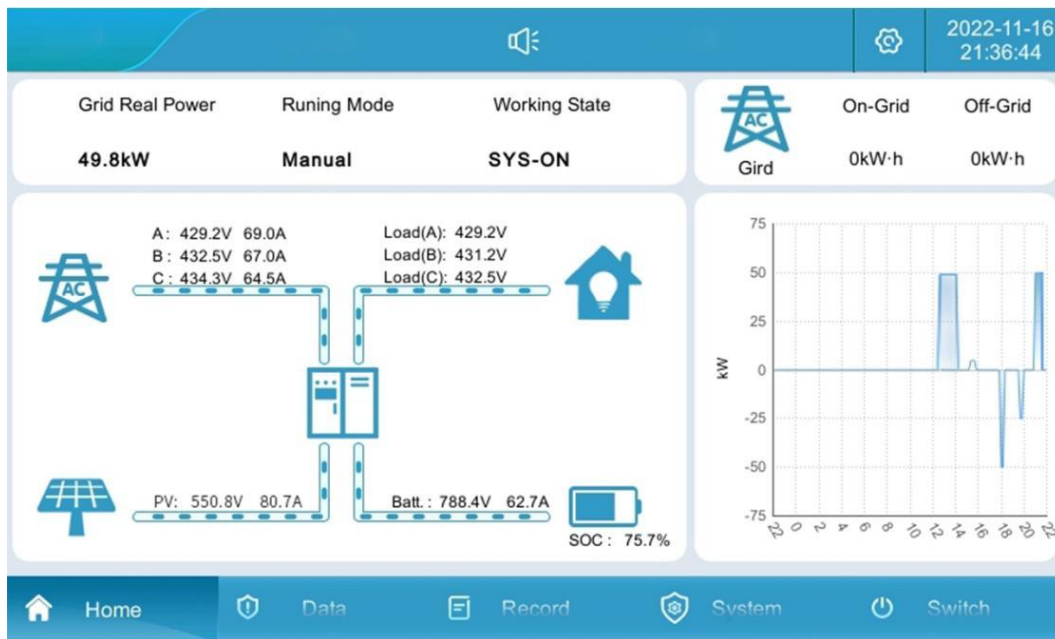
<b>Photovoltaic(PV) port</b>			
<i>PV voltage range</i>	<i>250-500V(MPPT)</i>	<i>250-500V(MPPT)</i>	<i>250-500V(MPPT)</i>
<i>Max.PV current</i>	<i>160A</i>	<i>160A*2</i>	<i>160A*3</i>
<i>MPPT quantity</i>	<i>1/2</i>	<i>1/2</i>	<i>1/3</i>
<b>Battery port</b>			
<i>Battery voltage range</i>	<i>600~950V</i>	<i>600~950V</i>	<i>600~950V</i>
<b>General Parameters</b>			
<i>Degree of protection</i>	<i>IP21(Indoor); IP55(Outdoor)</i>	<i>IP21(Indoor); IP55(Outdoor)</i>	<i>IP21(Indoor); IP55(Outdoor)</i>
<i>Isolation mode</i>	<i>Transformer isolation</i>	<i>Transformer isolation</i>	<i>Transformer isolation</i>
<i>Shutdown self-discharge</i>	<i>&lt;0.1% of rated power (without transformer)</i>	<i>&lt;0.1% of rated power (without transformer)</i>	<i>&lt;0.1% of rated power (without transformer)</i>
<i>Display</i>	<i>LCD</i>	<i>LCD</i>	<i>LCD</i>
<i>Relative humidity</i>	<i>0 ~ 95% (no condensation)</i>	<i>0 ~ 95% (no condensation)</i>	<i>0 ~ 95% (no condensation)</i>
<i>Noise</i>	<i>&lt; 78dB</i>	<i>&lt; 78dB</i>	<i>&lt; 78dB</i>
<i>Ambient temperature</i>	<i>-25℃ to +60℃ (derating above 45℃)</i>	<i>-25℃ to +60℃ (derating above 45℃)</i>	<i>-25℃ to +60℃ (derating above 45℃)</i>
<i>Cooling mode</i>	<i>Intelligent air-cooled</i>	<i>Intelligent air-cooled</i>	<i>Intelligent air-cooled</i>
<i>Altitude</i>	<i>3000m (&gt; 3000m reduction)</i>	<i>3000m (&gt; 3000m reduction)</i>	<i>3000m (&gt; 3000m reduction)</i>
<i>Communication interface</i>	<i>RS485/CAN/Ethernet</i>	<i>RS485/CAN/Ethernet</i>	<i>RS485/CAN/Ethernet</i>
<i>Dimensions (W*D*H)</i>	<i>800*800*2100mm(Indoor); 900*1000*2100mm(Outdoor)</i>		
<i>Weight (approx.)</i>	<i>710kg (Indoor); 910kg (Outdoor)</i>	<i>910kg (Indoor); 1010kg (Outdoor)</i>	<i>1100kg (Indoor); 1300kg (Outdoor)</i>

## 1.6. Human-machine Interface Introduction

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

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## 1.7. Appearance Diagram

