



Efficient, intelligent and reliable energy solutions

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## An all-round energy manager for households and small commercial and industrial users

Focusing on distributed energy demands, it integrates power generation, energy storage, and power consumption optimization, providing users with one-stop green energy solutions.



### Home Users

Reduce electricity bills through the peak-valley electricity price model.

The battery-priority mode ensures the power supply for critical loads.

Support 100% renewable energy self-consumption and reduce carbon emissions.



### Small Commercial / Public Facilities

Meet the needs of multiple loads and support grid-connected and off-grid switching.

It can provide reliable power supply for applications such as base stations and monitoring systems.



# Functional Features

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## **Bidirectional Inverter**

- 01 It supports the conversion of photovoltaic DC power into AC power for grid connection and enables bidirectional conversion of battery charging and discharging.
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## **Optimized Battery Management**

- 02 It is compatible with lithium-ion and lead-acid batteries, supports three-stage charging and battery equalization, and extends the battery life.
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## **Comprehensive Protection Functions**

- 03 It includes functions such as ground fault alarm, islanding protection, and leakage protection to ensure the safe operation of the system.
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## **IP66 Protection Level**

- 04 It is suitable for indoor and outdoor installation and can withstand harsh environments.
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## **Peak-Valley Electricity Price Mode**

- 05 It uses the electricity price difference for energy storage and discharge to reduce power consumption costs.
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## **Battery-Priority Mode**

- 06 It ensures the power supply for critical loads in case of grid instability.
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## **APP/Web Remote Monitoring**

- 07 Real-time monitoring of operation status, power generation, and energy consumption data is available.
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## **Multiple Protection Functions**

- 08 It has functions such as short-circuit protection, over-temperature protection, islanding protection, and leakage protection.
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# Peak-Valley Charge and Discharge

Obtain the local real-time electricity price through the APP and set it to charge during low-price periods and discharge during high-price periods.  
\*Note: This function is an optional feature and will be provided through OTA updates.



## +€ 3312

"Save up to € 3312 in electricity costs annually."

Smart energy storage PV system

€3,312/year

Photovoltaic system capacity: 9kW (maximum input power of SU-AONE6K)

Annual equivalent full-load generation hours: 1,000 hours (typical value in Germany)

Annual power generation: 9kW × 1,000 hours = 9,000 kWh/year

Efficiency: 93.6%

Electricity price: €0.4/kWh (calculated based on the German price of €0.4 per kWh)

**Annual savings = 9,000kWh × 93.6% × €0.4/kWh = €3,312 / year**



# Application Scenarios

## Home Solar Systems

Utilize photovoltaics and battery storage to reduce electricity bills.



## Commercial Applications

Suitable for small shops, charging stations, etc., and supports the operation of multiple loads.



## Functional Features

### Compatible with 99% of existing photovoltaic panels

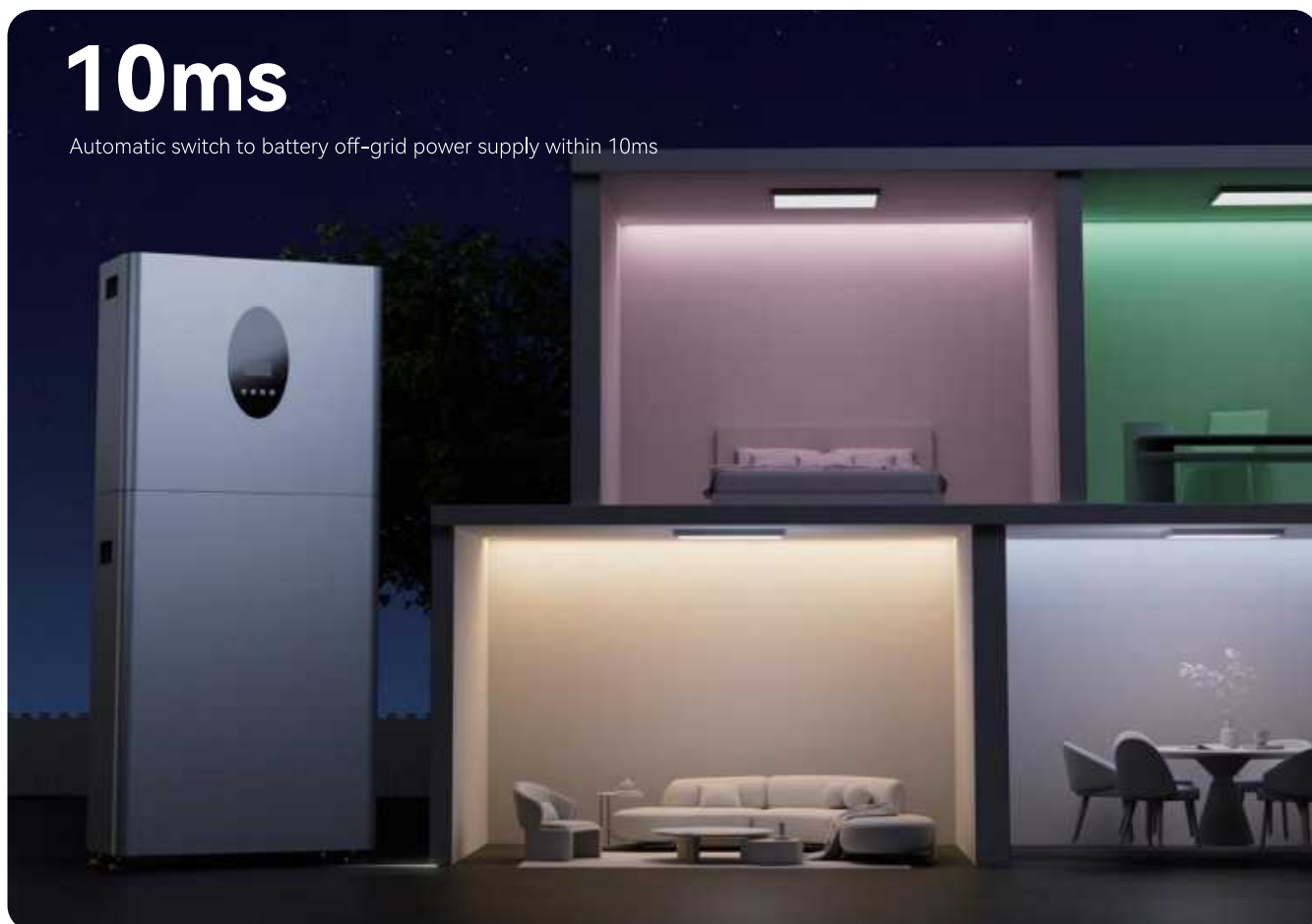
MPPT tracking efficiency is as high as 99.9%, with a maximum power of 1600W



### UPS emergency power supply

In case of a sudden power outage, it automatically switches to power supply within 10ms, providing emergency power for household appliances.

automatically switches to power supply within 10ms, providing





**-20~55°C**

Operating environment



**15year**

Reliable service life



**5year**

Warranty period



**IP65**

Protection level

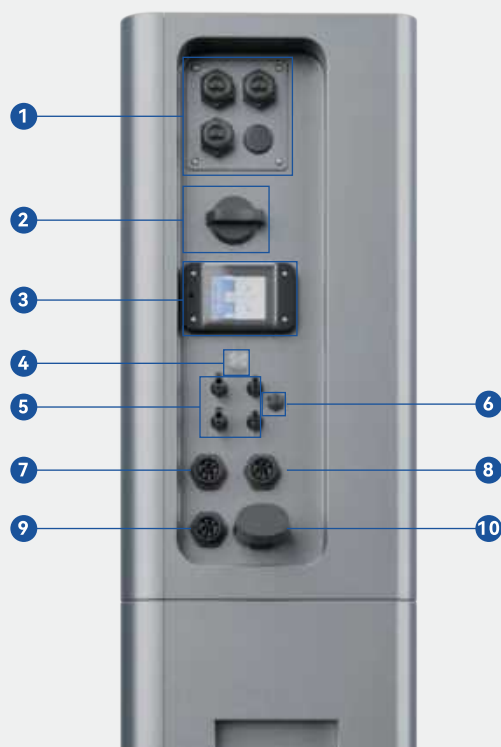


# Interfaces and Dimensions

## interfaces



- 1 COM
- 2 PV DC Switch
- 3 Battery Power Switch
- 4 EPS Switch
- 5 PV1+,PV1-,PV2+,PV2-
- 6 Exhaust Valve
- 7 GRID
- 8 EPS
- 9 GEN
- 10 WIFI



# Parameters

## Parameters

### PV Input

Maximum PV input power (kW)  
9

Full Power MPPT Voltage(VDC)  
250-500V

Max. Short-circuit Current(A)  
25/25

Maximum PV open-circuit voltage (V)  
550

Start-up Voltage(VDC)  
90

MPPT Tracker/Strings  
2/1

MPPT Range@Operating Voltage(VDC)  
80-520

Max. Input Current per MPPT(A)  
19/19

Nominal Input Voltage(V)  
360

### AC Output(On-Grid)

Nominal Output Power to Grid ( KW)  
6

Max. Apparent Current from Grid (A)  
26.1

Nominal Voltage/Frequency  
230V(176V~280V),50/60Hz,L+N+PE

Max. Apparent Power to Grid ( KVA)  
6

Nominal Output Current from Grid (A)  
26.1

Adjustable Power Factor  
0.8

Max. Apparent Power from Grid( KVA)  
6

Max. Output Current to Grid (A)  
26.1

THDI  
<2%

### AC Output(Back Up)

Nominal Output Power(KW)  
6

Max. Output Current(A)  
26.1

THDu  
<2%

Max. Apparent Power(KVA)  
6

Nominal Voltage/Frequency  
230V(176V~280V),50/60Hz,L+N+PE

Overload Capacity  
110%,10s/150%,5s/180%,1s/200%,100ms

Nominal Output Current(A)  
26.1

Automatic Switch Time(ms)  
<20

### Efficiency

Max. Efficiency  
96.65%

Max. Battery Charge/Discharge Efficiency  
94.60%

Europe Efficiency  
97.50%

MPPT Efficiency  
99.00%

### Protection

DC Switch  
Yes

AC Overvoltage Protection  
Yes

Anti-islanding Protection  
Yes

Peak/Valley Time Setting  
Yes

DC Reverse Polarity Protection  
Yes

AC Short-circuit Protection  
Yes

Residual-current Monitoring  
Yes

DC/AC Surge Protection  
Type II

Ground Fault Monitoring  
Yes

Insulation Resistance Monitoring  
Yes

# Parameters

## Parameters

### General Data

#### HMI

Touch LCD & APP

#### Communication

WiFi/LAN

#### Relative Humidity

0~95%(Non-condensing)

#### Noise Emission

≤29dB

#### BMS

RS485,CAN

#### Ingress Protection

IP66

#### Max. Operating Altitude

4000m (Derating above 3000m )

#### Self-consumption(W)

<15

#### EMS/Meter

RS485

#### Operating Temperature Range

-25~60°C

#### Cooling

Natural

### Battery

#### Battery Type

LiFepo4

#### Nominal capacity(25°C,0.2C)

15.07KWH

#### Max. continue discharge current(A)

200A

#### Terminal

M8

#### safety standard

UN38.3,MSDS

#### Cycles

≥6000

#### Voltage window (vdc)

44.8~58.4V

#### Maxpulse discharge current(A)

300A sec

#### storage temperature

0°C~30°C

#### communication function

CAN/RS485 Intelligent BMS can communicate with multiple solar inverter, For example: Deye, Growatt, voltronic, GOODWE, SMA, SOFAR , etc.

#### Nominal Battery Mode

48V314AH

#### Folat charge voltage(vdc)

56.0V

#### Max. continue charge current(A)

100A

#### storage duration

6 months at 25°C

### Dimension

#### Size

520mm\*525mm\*225mm

#### Weight

24kg

## After-sales Policy

Warranty policy: Provide a 5-year warranty. (For details, see the warranty in the instruction manual)

Maintenance advice: Regularly clean the heat dissipation system and check the electrical connections.