

# Storcube

# Residential DC Microgrid System



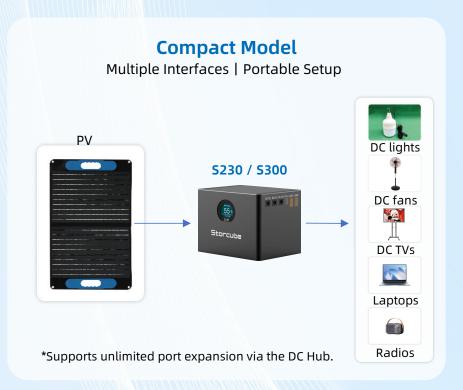
Let Energy Storage Walk into Life.

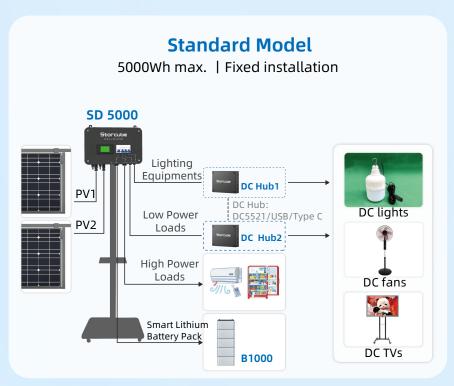
Beijing Ceepower Storage Technology Co.,Ltd.



**Residential DC Microgrid System** is an advanced direct current power network tailored for household applications. It seamlessly combines solar photovoltaic (PV) systems, energy storage solutions, and DC-powered devices to enhance clean energy utilization, ensure energy independence, and optimize power management. Unlike conventional AC grids, the DC microgrid is built around direct current, significantly reducing energy losses from AC/DC conversions. This design delivers superior efficiency and adaptability, making it a cutting-edge solution for sustainable and efficient energy systems.

## **Working Principle**





## **Solution Advantages**





Plug-and-Play

Easy to install and operate, the

system requires only a simple

connection to solar panels and

DC loads to start functioning

immediately.



### Cost-Effective and Energy-Saving

Compared to traditional diesel generators, it drastically reduces electricity costs by eliminating fuel expenses, operating costs, and the need for professional maintenance.



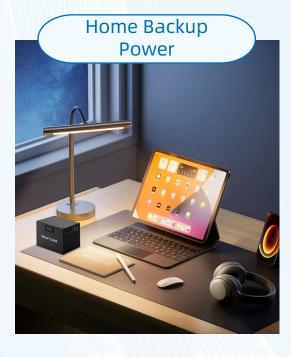


# Storcube S230 / S300 DC Power Box

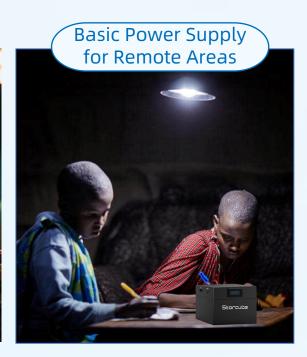
The Storcube S230 S230 / S300 is a compact, portable DC energy storage solution that supports charging via solar panels or mains power (Type-C interface). Designed for low-power DC devices, it features multiple output ports to power DC appliances like TVs and fans and serves as a portable power bank for emergency laptop charging. Its lightweight, portable design makes it ideal for regions with limited power infrastructure, such as remote areas in Southeast Asia and Africa.



## **Scenarios**







## **Advantages**



### **Versatile Charging Options**

Supports solar panel and Type-C AC charging, adaptable to various power needs.



#### **Wide Compatibility**

Equipped with multiple DC and USB ports for direct connection to a range of devices.



#### **Portable & Lightweight**

Compact design allows for easy carrying and fits small spaces.



#### **Eco-Friendly & Energy-Saving**

Solar charging helps reduce energy costs and dependency on the grid.



#### **Reliable Backup**

Acts as an emergency power source for devices like laptops, ensuring continuous operation.



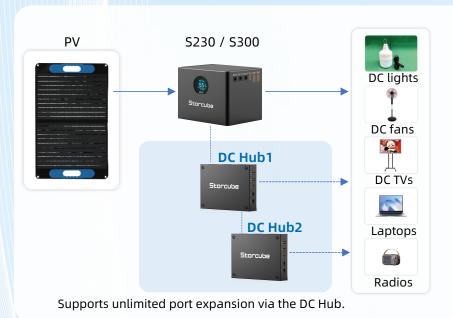
# Storcube S230 / S300 DC Power Box



Item	Parameter		
Product Name	DC Power Station		
Product Model	S230	S300	
Dimensions (L*W*H)	127*97*100 (mm) ; 5.0*3.8*3.9 (in.)		
Battery Voltage	22.2V		
Battery Capacity	230Wh	300Wh	
Battery Type	Li-ion		
PV Input	100W		
DC XT60	24V/10A, 1 outputs; Supports bidirectional charging and discharging		
USB-A	1 output, 5V/2.4A,12W		
USB-A Fast Charge	1 output, 5V/2.4A, 9V/2A, 12V/1.5A,18W		
Type-C	1 output, 5/9/12/15/20V-5A,100W		
DC5521	3 outputs, 12.6V/3A, maximum power 38W per output.		
LCD	Display voltage, capacity, and other information.		
Supported Household Appliances	Mobile phone, lighting, fan, TV, flashlight, radio, laptop, etc.		
Protection Function	Yes		



## Storcube DC Hub



The Storcube DC Hub is an integrated device designed for connecting and expanding DC-powered equipment. It offers multiple ports to seamlessly connect electronic devices such as laptops, smartphones, and tablets with peripherals like monitors, keyboards, mice, and external storage, while providing reliable DC power supply.

## **Product Advantages**

#### **Versatile Connectivity**

Equipped with 11 DC ports, supporting simultaneous connections for various devices.

#### **Space-Saving Design**

Eliminates the need for extra power adapters and sockets, optimizing workspace and desktop organization.

## 11 Ports for Multi-Device Expansion





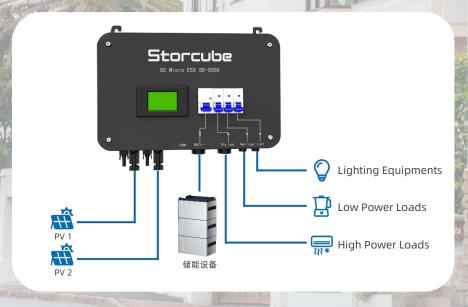


Item	Parameter	
Output Power	1000W	
USB-A	1 port, 5V/2.4A	
USB-A (Fast Charging)	1 port, 5V/2.4A, 9V/2A, 12V/1.5A	
Type-C	1 port, 5/9/12/20V-5A, 100W	
DC5521	2 ports, 12V/3A, maximum output 36W per port	
DC	24V/10A,6 ports, supporting various expansions	



## Microgrid Photovoltaic DC Module **SD5000**

The SD5000 is a high-efficiency, stable, and intelligent DC-DC converter designed specifically for solar energy storage systems. It efficiently converts solar energy into stable DC power for battery storage or direct supply to various DC loads. Ideal as a core component for off-grid home systems, photovoltaic applications, and portable energy storage devices.





## **Product Advantages**



### **Power Supply**

Effectively address Africa's electricity shortage, meeting basic power needs, and ensuring the normal operation of daily life and production activities.



#### **Economical** and Efficient

Significantly reduce electricity costs compared to traditional diesel generators, with no fuel expenses or operating costs, and no need for professional



#### 🖶 Plug and Play

Easy to install and operate. Simply connect the solar panels and DC loads for immediate use.



#### Flexible Expansion

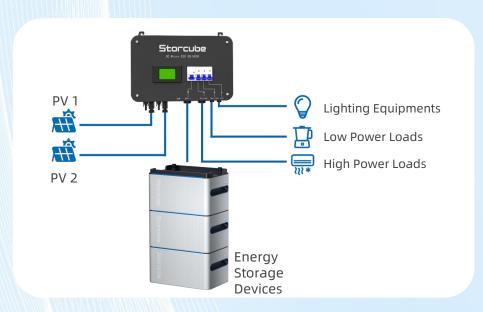
Modular design and stackable parallel connections allow users to expand system flexibly according to their actual electricity usage.

Item		Parameter	
Input	MPPT Input Channels	2 channels	
	Maximum Input Power per Channel	500W * 2	
	MPPT Input Voltage Range	18-55V	
	Maximum Input Current per Channel	13A * 2	
Output	Capacity	1kWh-5kWh	
	Total Output Power	5000W	
	Output Channels	3 channels	
	Rated Output Voltage	51.2V	
Others	Communication Method	485	
	Dimensions (excluding battery)	12.99*8.27*2.64(in) / 330*210*67(mm)	



## **Smart Lithium Battery Pack B1000**

The B1000 is a cost-effective energy storage and power pack designed to meet the demands of DC microgrid energy storage. It is also suitable for AC microgrid storage and portable power expansion. The B1000 features flexible scalability and user-friendly operation, making it an adaptable and efficient solution. Equipped with a built-in LiFePO4 battery and an advanced Battery Management System (BMS), it ensures stable performance in various environments, with a lifespan that matches the battery's durability.





## **Product Advantages**





User-Friendly Operation



Durable and Reliable



Safe, Efficient, and Versatile

	Item	Parameter	Remarks	
Main Unit	Capacity	1024 Wh		
	Dimensions (L×W×H)	330*210*195(mm)	Single pack	
	Weight	11Kg		
	Battery Type	LiFePO4		
	Cycle Life	≥6000 cycles		
	Maximum Output Power	800W		
	Output Voltage Range	20-45V		
	Protection Rating	IP65		
	Charge/Discharge Operating	-20°C~45°C	Heating activates below 500	
	Temperature	-20°C~45°C	Heating activates below 5°C;	
	Electric Heating Startup Temperature	<5℃	charging enabled above 0°C.	
Protection	Overcharge, Over-discharge,			
	Overcurrent, High Temperature, Low	Support		
	Temperature, Short Circuit protection			
Others	Heating Function	Support		
	Balancing Mode	Support		
	Communication	CAN		

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