



Dependable Backup Power for Businesses and Homes with the M1C-100kW/108kWh Lithium Battery Storage

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: SHPN
- Certification: UN38.3/UN3481/IEC62619/IEC62040-1/CE/UKCA(EMC/RED)/VDE2510-50/UL1973/UL9540A/UL9540 G99, VDE-AR-N 4105 / EN 50549-1/EN 50549-10 / EIFS 2018.2/ IEC 62116/ IEC 61727/ IEC 60068/ IEC 61683/ EN 50530
- Model Number: A100-OMNI
- Minimum Order Quantity: 1 units
- Price: consult prices online
- Packaging Details: consult online
- Payment Terms: T/T
- Supply Ability: consult online



Product Specification

- Battery Type: Li-ion (LFP)
- Nominal Capacity (kWh): 108
- Cycle Life: >7000
- Cooling System: Air Cooling
- Dimension (W*D*H, Mm): 1300*2485*1150
- Highlight: **Lithium Battery Storage,
Lithium Battery Storage,
Lithium Battery Storage**

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Product Description

Dependable Backup Power for Businesses and Homes with the M1C-100kW/108kWh Lithium Battery Storage

	108~648kWh
	100~600kW
	1C
	400Vac

Application Scenarios



**Wide Temp.
Range**



**Ancillary
Service**



**Electricity
Arbitrage**



**Demand
Response**



Backup

The **M1C-100kW/108kWh Energy Storage System** is engineered for both commercial and residential applications, providing highly efficient energy storage solutions for various sectors. It is ideal for:

Residential Energy Management

Homeowners can harness this system to store solar or grid energy, enabling more efficient use of renewable energy and minimizing electricity costs. Its **high round-trip efficiency of 95%** ensures maximum energy retrieval and use, even in areas with fluctuating power prices.

Commercial and Industrial Applications

This system is perfect for businesses seeking to optimize energy use by reducing peak demand charges and improving operational efficiency. With **100kW rated AC power** and the ability to connect up to **5 units in parallel**, the M1C system can scale to meet the demands of larger facilities, while offering **97.3% CEC efficiency** for cost-effective energy storage and use.

Renewable Energy Integration

For solar and wind energy systems, the M1C unit can store excess generation during periods of high production and discharge it when production dips. With a **DC voltage range of 667~828V** and **108kWh storage capacity**, it effectively supports renewable energy integration, contributing to a sustainable energy future.

Backup Power

The M1C system provides reliable backup power for critical infrastructure, ensuring business continuity during power outages. Its **quick response time** and **overload capacity** make it ideal for applications where uptime is essential, such as hospitals, data centers, or telecommunications facilities.



All in One Solution



Wide Temp. Range



Flexible Configuration



High C rate

General Data	M1C-100kW/108kWh
Dimension (W*D*H,mm)	1300*2485*1150
Weight(tons)	2(incl.battery)
Working Temperature Range(°C)	-25~45*
Protection Class	IP55
Altitude (m)	≤2000
Humidity (RH)	0~95%
Fire Extinguishing	Aerosol
Cooling System	Air Cooling
Cooling System Consumption (kW,Cooling/Heating)	3/2
Aux.PowerConsumption (kW,continuous/peak, incl.HVAC)	2.5/4

Max.Parallel No.	5
Anti-Corrosion	C5(Air Conditioner C4H)
Certification	UN38.3/UN3481/EC62619/EC62040-1/CE/UKCA(EMC/RED)/VDE2510-50/UL1973/UL9540A/UL9540/CE EMC/CE LVD/EN 50549-1:2019/EN 50549-2:2019/IEC 61000-6-2/IEC 62477-1
Battery Data	
Battery Type	Li-ion(LFP)
Nominal Capacity (kWh)	108
Continuous Operation C-rate	1C
Depth of Discharge	98%(single string)
Cycle Life	>7000
DC Voltage Range(Vdc)	667~828 (single string)
Continuous Operation Current (A)	148
Round-trip Efficiency@0.5C-rate	95%
PCS DC/AC Data On-grid Mode	
Rated AC Power (kW)	100
Rated AC Output Voltage (Vac)	230/400
Rated AC Output Frequency (Hz)	50
Max AC Current(A)	145 (Linear Load)
Overload Capacity	120%@60sec
AC PF	1.0(Lagging)~1.0(Leading)
CEC Efficiency@0.5C-rate	97.3%(Peak 98.1%)
Isolation Type	Non-isolation
Operation Mode	
Communication Type	Modbus TCP/IP,Modbus RTU
Operation Logic	Wide Temp Range/Ancillary Service /Electricity Arbitrage/Demand Response/Backup

Min. configuration
Optional configuration
Standard configuration

System configuration							
A100-OMNI	Inverter Type		100kW				
	Inverter QTY		1	2	3	4	5
	Cabinet QTY	kWh	100	200	300	400	500
	1	108					
	2	216					
	3	324					
	4	432					
	5	540					

Advantages

High Efficiency and Scalability

With **108kWh storage capacity** and **95% round-trip efficiency**, the M1C system ensures minimal energy loss and maximizes the usability of stored power. Its **modular design** allows for **up to 5 units in parallel**, making it highly scalable to meet the energy needs of various applications.

Durability and High-Performance Design

Built to operate in challenging environments, the system works in a **temperature range from -25°C to 45°C**, with an **IP55 protection class**

ensuring durability even in harsh conditions. It's also equipped with **C5 anti-corrosion protection**, making it suitable for installation in coastal or industrial areas with high levels of exposure to corrosion.

Advanced Battery Technology

The system uses **Li-ion (LFP) battery technology** with **over 7,000 cycles** of lifespan, ensuring long-term reliability and minimal maintenance. The **98% depth of discharge** and **continuous operation at 1C rate** enable optimal energy storage, and its **DC voltage range** from **667V to 828V** offers flexibility for various installations.

Efficient Power Conversion

The **PCS (Power Conversion System)** delivers **100kW AC output power** with a **CEC efficiency of 97.3%** at a **0.5C rate**, ensuring that more energy is available for consumption. The system also supports **120% overload capacity for 60 seconds**, enhancing reliability during peak loads.

Flexible Operation Modes

The M1C system can be used in a variety of operation modes, including **wide temperature range operation**, **ancillary services**, **electricity arbitrage**, **demand response**, and **backup power**. These versatile capabilities help businesses optimize energy usage and reduce operational costs.

Safe and Certified

The M1C system is certified by **UN38.3**, **IEC62619**, **UL1973**, and other international standards, ensuring high safety and performance levels. The inclusion of an **aerosol fire extinguishing system** further improves safety, providing added protection in the unlikely event of an emergency.

Shipping Methods

Supports global air and sea shipping

If you require more detailed product information or have customized requests, please contact us. Providing efficient service that satisfies our customers is our responsibility.



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