

China



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

# **Basic Information**

Place of Origin:

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
<ul> <li>Model Number:</li> </ul>	A100-OMNI
Minimum Order Quantity:	1 units
• Price:	consult prices online
<ul> <li>Packaging Details:</li> </ul>	consult online
<ul> <li>Payment Terms:</li> </ul>	T/T

consult online



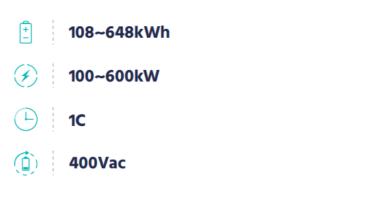
# **Product Specification**

• Supply Ability:

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

## **Product Description**

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



### **Application Scenarios**



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.

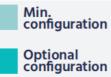


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# 🚀 High C rate

Gerneral 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/Heatin g)	3/2
Aux.PowerConsump tion (kW,continuous/pea k, incl.HVAC	2.5/4

Max.Parallel No.	5		
Anti-Corrosion	C5(Air Conditioner C4H)		
	UN38.3/UN3481/EC62619/EC62040-		
Certification	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		
Pattory Data			
Battery Data Battery Type			
Nominal Capacity	Li-ion(LFP)		
(kWh)	108		
Continuous Operation C-rate	1C		
Depth of Discharge	98%(single string)		
Cycle Life	>7000		
DC Voltage	667~828 (single string)		
Range(Vdc)			
Continuous			
Operation Current	148		
(A)			
Round-trip Effciency@0.5C-	95%		
rate			
PCS DC/AC Data O	n-arid Mode		
Rated AC Power	1		
(kW)	100		
Rated AC Output	230/400		
Voltage (Vac)			
Rated AC Output	50		
Frequency (Hz)			
Max AC Current(A)	145 (Linear Load)		
Overload Capacity	120%@60sec		
AC PF	1.0(Lagging)~1.0(Leading)		
CEC	07.2% (Paper 09.1%)		
Efficiency@0.5C- rate	97.3%(Peak 98.1%)		
Isolation Type	I Non-isolation		
Operation Mode			
Communication	Modbus TCP/IP,Modbus RTU		
Туре	Wide Temp Range/Ancillary Service /Electricity		
Operation Logic	Arbitrage/Demand Response/Backup		



Standard configuration

				System cont	iguration		
	Inver	rter Type			100kW		
	In	verter QTY	1	2	3	4	5
	Cabinet QTY	kWh kW	100	200	300	400	500
A100-	1	108					
OMNI	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.

06	willa@fuhaosolar.com	Juhaosolar.com		
Rm3810 Baoli E Building Pa Zhou Haizhu district Guangzhou				