



Mentech BP2400 Solar Generator - Key Features

2048Wh LiFePO4 Battery: With 6000+ cycle life, perfect for long-term use.

1600W & 145V PV Input / 1600W AC Input & 2200W AC Output: Supports up to 1600W solar input with increased voltage, compatible with various panels. For example, four 440W panels are ideal.

Expandable Battery Packs: Scalable system from 2 kWh to 10 kWh with the ability to stack up to 4 battery packs, each equipped with advanced BMS for enhanced safety.

Simultaneous On/Off-Grid Functionality: Enables faster power usage and allows operation of more appliances simultaneously, maximizing energy output.

Emergency Power Supply & Portable Design: Automatically provides backup power during outages. Lightweight and easy to carry, perfect for home or outdoor activities.

Built-in Micro Inverter & Plug-and-Play Simplicity: Simplifies installation, boosts efficiency with 800W on-grid savings, and requires no technical expertise for setup.

Mentech App Control: Enhanced security and remote energy management through a user-friendly app.

Features mentech



2048Wh LiFePO4 Battery with 6000+ cycle life

This high-capacity lithium iron phosphate (LiFePO4) battery offers an impressive 2048 watt-hours of energy storage. Compared to the Mentech BP2200, the battery life cycle has been significantly enhanced, increasing from 3500 cycles to over 6000. This improvement ensures greater long-term reliability and durability, making it ideal for both residential and off-grid applications.



1600W and up to 145V PV Input

BP2400 supports up to 1600w of solar input (PV), an upgrade from the BP2200's 1200w. Additionally, the PV input voltage has been increased to 145 volts from the previous 96 volts, giving you a wider range of solar panel options.



1600W AC input/2200W AC Output

Upgrade your power game with the BP2400! Featuring a powerful 1600W AC input and a robust 2300W AC output, this latest model outpaces the BP2200's 1200W AC input and 2200W AC output. With the BP2400, you'll enjoy lightning-fast charging, ensuring you spend less time waiting and more time powering up. Perfect for both on-grid and off-grid adventures, the BP2400 delivers superior performance and efficiency to keep you energized wherever you go.



Expandable Battery Packs

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Built-in Micro Inverter

Say goodbye to the hassle of buying a separate inverter! Thanks to the built-in micro inverter, you can enjoy up to 800W in on-grid savings. This clever feature converts direct current (DC) from your solar panels into efficient alternating current (AC) for your home or other applications. It simplifies installation and boosts system efficiency, so you can start saving and enjoying seamless energy right away!



Advanced Battery Management System (BMS)

The advanced Battery Management System (BMS) ensures optimal performance and safety by monitoring and managing key parameters like voltage, temperature, and charge cycles. This system protects the battery from overcharging, overheating, and other potential issues, extending its lifespan. Additionally, all expandable battery packs are equipped with their own BMS, ensuring consistent protection and efficiency across the entire system.



Simultaneous On/Off-Grid Functionality

The system can operate both on and off the grid simultaneously, offering flexibility in various scenarios. Whether you're connected to the grid or completely off it, the system can seamlessly switch between modes to ensure uninterrupted power supply.



Backup Power and UPS Function

In the event of a power outage, the system automatically switches to provide emergency power, keeping your essential devices running without interruption. This feature is especially crucial in areas prone to blackouts or natural disasters.



Mentech App Control

The newest version of the Mentech App is self-developed and offers significant improvements compared to the BP2200 model. It features enhanced security, regular updates, and optimized performance, ensuring you have a more secure, up-to-date, and efficient user experience when managing your energy system remotely.



Compact and Portable

The BP2400's compact design and convenient handles make it easy to carry, perfect for outdoor activities and traveling. Whether you're at home, on a camping trip, or embarking on any other adventure, this system ensures you have reliable power wherever you go.



Plug-and-Play Simplicity

Installation and operation are made easy with a plug-and-play design. You can set up the system quickly without needing extensive technical knowledge, making it accessible for anyone looking to enhance their energy independence.

Specification mentech



BP2400

Balcony Power Storage

Specification	
Model	BP2400
Battery Capacity	2048Wh:5%(40Ah/51.2V)
Battery Type	LiFeP04
Input	
AC Input	174-264V 1600W Max
Car Input	12-24V/15A 360W Max
SolarInput	PV18-100V/20A 1200W Max
Output	
Micro Inverter Connection	200W/400W/600W/800W Max
3 x AC	230V, 50Hz, 2200W, (4400W Peak)
2 x USB	QC18W Max
USB Type-C 1	PD 100W
USB Type-C 2	PD 27W
1*Cigarette Lighter	13.8V/12A Max+2*DC Rated Output 13.8V/5AMax(Total 12A Max)
General Parameter	
LED Light	3W MAX, 3 Levels with SOS function
Battery Cycle Life	3500 cycles, DOD>70%
Pass-Through Charging	Support
Charge Temperature	0~40°C(32~104°F)
Discharge Temperature	-10-40°C(14~104°F)
Product Size	465 x 260 × 295mm (18.31in x 10.24in x 11.61in)
Product Weight	23KG (51LBS)
Time of Charging	AC Charging (Silent Charging Mode) 7h AC Charging (Normal Charging Mode) 5h AC Charging (Quick Charging Mode) 2h















Solar Charging 2*36V 500W Solar Panels 2-3 Hours In Full Sun.















Specification	
Nominal Voltage	51.2Vd.c
Rated Capacity	2048Wh /40Ah
Model	E2000
Charge Termination Voltage	56.8V
Charging Voltage Limit	56.8V
Rated Charging Current	11A
Max Continuous charging Current	31A
Rated Discharging Current	60A
Max Continuous Discharging Current	70A
Discharge Termination Voltage	44V
Operating Temperature	0°C~40°C
Cycle Life	3500 charge-discharge cycles with State of Health (SOH) ≥70%
	(Note: 1C at 25'C environment)
Simultaneous Charging and Discharging	Support
Product Dimensions	480 x 255 x 240mm
Product Weight	18.5 kgs

E2000 Battery Pack

Space-saving

Freedom to increase battery capacity.

Extendable

Plug-and-play modular expansion design.

Module-design

Stackable placement, saving space.

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Model	BP2200	BP2400	BP2400 mit 1Akku (with 1 battery pack)	BP2400 mit 2Akku (with 2 battery pack)	BP2400 mit 3Akku (with 3 battery pack)	BP2400 mit 4Akku (with 4 battery pack)
Battery Capacity(total)	2,048 Wh	2,048 Wh	4,096Wh	6,144Wh	8,192Wh	10,240Wh
PV Input	1200W	1600W	1	/	/	/
PV Input Votage	18-96V	18-145V	/	I	1	1
AC Input	1500W	1600W	/	1	/	/
Battery Cycle Life	3500+	6000+	6000+	6000+	6000+	6000+
Expandable	8	⊘	②	Ø	Ø	Ø
Simultaneous On/Off-Grid	⊗	②				







