



EH6000-BL16000

All-in-One Inverter & Battery System

6 kW Inverter | 16 kWh LiFePO4 Battery | MPPT Solar Charging

The Enerup EH6000-BL16000 integrates a 6 kW inverter, MPPT solar charger, LiFePO4 battery storage, and BMS in one floor-standing cabinet for residential solar self-consumption and backup power applications.

KEY FEATURES

Integrated ESS

6 kW inverter and 16 kWh battery in one cabinet.

Built-in MPPT Charger

Integrated solar charging with 9 kW PV input.

Wide MPPT Range

PV operating voltage range from 80 to 450 VDC.

Feed-in to Grid

Supports grid-connected energy operation.

Pure Sine Wave

Stable AC output for residential backup loads.

Smart BMS

Battery management system supports safe operation.

Wi-Fi Monitoring

Remote monitoring supported via Wi-Fi.

Lithium Battery Activation

Supports lithium battery activation function.

QUICK SPECIFICATIONS - EH6000-BL16000

Model	EH6000-BL16000
System Type	All-in-one inverter and battery ESS
Rated AC Output Power	6 kW
Battery Energy	16 kWh
Usable Energy (90% DOD)	14.4 kWh
Max. PV Input Power	9000 W
PV Operating Voltage Range	80-450 VDC
Product Size (L x W x H)	430 x 481 x 736 mm

TECHNICAL SPECIFICATIONS - EH6000-BL16000

General	
Model	EH6000-BL16000
System Type	All-in-one inverter and battery ESS
Rated Inverter Output	6 kW
Battery Energy	16 kWh
Usable Energy	14.4 kWh (90% DOD)
AC Input	
Rated Input Voltage	208 / 220 / 230 / 240 VAC; L + N + PE
Input Voltage Range	90-280 VAC +/-3 V (normal mode); 170-280 VAC +/-3 V (UPS mode)
Frequency	50 / 60 Hz auto adaptive
AC Output	
Rated Capacity	6 kW
Output Voltage	208 / 220 / 230 / 240 VAC
Power Factor	1.0
Output Frequency	50 / 60 Hz +/-0.1%
Switch Time	10 ms
Waveform	Pure sine wave
Overload Capacity	60 s @ 102%-110%; 10 s @ 110%-130%; 3 s @ 130%-150%; 0.2 s @ >150%
Max. Efficiency	93% @ 48 VDC
PV / Charger	
Solar Charger Type	MPPT
Max. PV Input Current / Power	27 A / 9000 W
PV Operating Voltage Range	80-450 VDC
Max. PV Open Circuit Voltage	500 VDC
Max. PV Charge Current	120 A
Max. AC Charge Current	120 A
Max. Charge Current (PV + AC)	120 A
Battery	
Battery Type	LiFePO4
Nominal Battery Voltage	51.2 VDC
Rated Energy	16 kWh (0.5C, 25 °C)
Usable Energy	14.4 kWh (90% DOD)
Max. Charge / Discharge Current	150 A / 150 A
Operating Voltage Range	40.0-58.4 VDC
Battery Operating Temperature	-10 °C to +50 °C
Interface	
Display	LCD
Communication	USB
Monitoring	Wi-Fi
Environment	
Ingress Protection	IP20
Operating Temperature	-10 °C to +50 °C
Relative Humidity	5%-95%, non-condensing
Storage Temperature	-15 °C to +60 °C
Max. Operating Altitude	4000 m; derating above 1000 m
Mechanical	
Product Size (L x W x H)	430 x 481 x 736 mm
Package Size (L x W x H)	540 x 510 x 895 mm
Net Weight	136 kg
Gross Weight	159 kg

Specifications are subject to change without notice. Product appearance may vary by configuration. For technical support, warranty service, and certification documentation, contact your Enerup distributor.