



EH10000-BL30720 EH12000-BL61440

Stackable All-in-One Inverter & Battery System

10 kW + 30.72 kWh | 12 kW + 61.44 kWh | Dual MPPT | LiFePO4

Enerup stackable all-in-one ESS integrates hybrid solar inverter and modular LiFePO4 battery storage for scalable backup power and solar self-consumption.

KEY FEATURES

Stackable All-in-One ESS

Integrated inverter and LiFePO4 battery modules for scalable storage.

10 kW / 12 kW AC Output

Two configurations for residential and light-commercial applications.

30.72 / 61.44 kWh Energy

System energy based on 15.36 kWh battery modules.

Dual MPPT Solar Charging

PV input supports up to 15 kW depending on MPPT configuration.

Pure Sine Wave Output

Stable AC output for sensitive household and business loads.

Feed-in to Grid

Supports grid-connected solar energy operation.

Generator Compatible

Supports generator operation with dedicated transfer timing.

Wi-Fi Monitoring

Remote monitoring support for daily system visibility.

QUICK SPECIFICATIONS

Parameter	EH10000-BL30720	EH12000-BL61440
Marketing Configuration	10 kW + 30 kWh	12 kW + 60 kWh
Rated AC Output Power	10000 W	12000 W
Nominal Battery Energy	30.72 kWh	61.44 kWh
Usable Energy at 90% DOD	27.6 kWh	55.3 kWh
Battery Module	2 x 15.36 kWh	4 x 15.36 kWh
Nominal Battery Voltage	51.2 VDC	51.2 VDC
Solar Charger Type	Dual MPPT	Dual MPPT
Ingress Protection	IP21	IP21

TECHNICAL SPECIFICATIONS

Parameter	EH10000-BL30720	EH12000-BL61440
General		
Model	EH10000-BL30720	EH12000-BL61440
Product Type	Stackable all-in-one inverter and battery system	Stackable all-in-one inverter and battery system
Marketing Configuration	ESS 10 kW + 30 kWh	ESS 12 kW + 60 kWh
Battery Module Configuration	15360 Wh x 2	15360 Wh x 4
AC Input		
Rated Input Voltage	220 / 230 / 240 VAC; L + N + PE	220 / 230 / 240 VAC; L + N + PE
Input Voltage Range	90-280 VAC ± 3 V normal mode; 170-280 VAC ± 3 V UPS mode	90-280 VAC ± 3 V normal mode; 170-280 VAC ± 3 V UPS mode
Frequency	50 / 60 Hz, auto detection	50 / 60 Hz, auto detection
AC Output		
Rated AC Output Power	10000 W	12000 W
Output Voltage	220 / 230 / 240 VAC	220 / 230 / 240 VAC
Power Factor	1.0	1.0
Output Frequency	50 / 60 Hz $\pm 0.1\%$	50 / 60 Hz $\pm 0.1\%$
Switch Time	10 ms (APL / UPS mode); 20 ms (GEN mode)	10 ms (APL / UPS mode); 20 ms (GEN mode)
Output Waveform	Pure sine wave	Pure sine wave
Overload Protection	105%-110% load: shutdown after 5 min; 110%-125% load: shutdown after 10 s; >125% load: shutdown after 5 s	105%-110% load: shutdown after 5 min; 110%-125% load: shutdown after 10 s; >125% load: shutdown after 5 s
Max. Efficiency in Battery Mode	94% @ 48 VDC	94% @ 48 VDC
PV / AC Charger		
Solar Charger Type	Dual MPPT	Dual MPPT
Max. PV Input Current / Power	1 x MPPT: 27 A / 9 kW; 2 x MPPT: 22.5 A / 15 kW	1 x MPPT: 27 A / 9 kW; 2 x MPPT: 22.5 A / 15 kW
PV Operating Voltage Range	60-450 VDC	60-450 VDC
Max. PV Open Circuit Voltage	500 VDC	500 VDC
Max. PV Charge Current	160 A	160 A
Max. AC Charge Current	160 A	160 A
Max. Charge Current (PV + AC)	160 A	160 A
Battery		
Battery Type	LiFePO4	LiFePO4
Nominal Battery Voltage	51.2 VDC	51.2 VDC
Rated Energy	30.72 kWh	61.44 kWh
Usable Energy at 90% DOD	27.6 kWh	55.3 kWh
Max. Charge / Discharge Current	200 A / 200 A	200 A / 200 A
Operating Voltage Range	40.0-58.4 VDC	40.0-58.4 VDC
Battery Operating Temperature	-10 °C to +50 °C	-10 °C to +50 °C
Interface & Monitoring		
Display	LCD	LCD
Communication	RS485 / RS232 / USB / Dry Contact	RS485 / RS232 / USB / Dry Contact
Monitoring	Wi-Fi	Wi-Fi
Environment		
Ingress Protection	IP21	IP21
Operating Temperature	-10 °C to +50 °C	-10 °C to +50 °C
Relative Humidity	5%-95%, non-condensing	5%-95%, non-condensing
Storage Temperature	-15 °C to +60 °C	-15 °C to +60 °C

TECHNICAL SPECIFICATIONS (CONTINUED)

Parameter	EH10000-BL30720	EH12000-BL61440
Max. Operating Altitude	4000 m; derating above 1000 m	4000 m; derating above 1000 m
Mechanical		
Product Size (Inverter)	680 x 520 x 182 mm	680 x 520 x 182 mm
Product Size (Battery Module)	680 x 520 x 246 mm / pc	680 x 520 x 246 mm / pc
Package Size (Inverter)	736 x 576 x 336 mm	736 x 576 x 336 mm
Package Size (Battery Module)	760 x 600 x 444 mm / pc	760 x 600 x 444 mm / pc
Net Weight	Inverter: 29 kg; battery: 119 kg / pc	Inverter: 29 kg; battery: 119 kg / pc
Gross Weight	Inverter: 33 kg; battery: 139 kg / pc	Inverter: 33 kg; battery: 139 kg / pc

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.