

LEAPTON ENERGY

EH-B05

VERSION: 2025 V3

* For the most up-to-date information, please refer to the latest version of this datasheet.



SWITCH YOUR LIFE

ENERGY STORAGE SOLUTIONS



ADVANTAGE

CONVENIENT

Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance. The product supports over-the-air (OTA) upgrade.

SAFE AND RELIABLE

Cathode material is made from LiFePO₄ with safety performance and long cycle life. The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, and excellent performance of shallow charge and discharge.

INTELLIGENT BMS

It has protection functions including over-discharge, over-charge, over-current, and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.

ECO-FRIENDLY

The whole module is non-toxic, non-polluting, and environmentally friendly.

FLEXIBLE CONFIGURATION

Multiple battery modules can be connected in parallel for expanding capacity and power.

WIDE TEMPERATURE

Operating temperature range is from -20° C to 55° C, with excellent discharge performance and cycle life.

MAIN PARAMETER



Model		EH-B05-51.2/614	
Cell Chemistry	LiFePO ₄		
Module Energy (kWh)	5.12		
Module Nominal Voltage (V)	51.2		
Module Capacity (Ah)	100		
Battery Module Qty In Series (Optional)	12		
Cell Configuration	192S1P		
System Nominal Voltage (V)	614.4		
System Operating Voltage (V)	480~700.8		
System Energy (kWh)	61.44		
System Usable Energy (kWh)	55.29		
Charge/Discharge Current (A)	Recommended	50	
	Max	100	
Operating Temperature (°C)	Charge: 0~55, Discharge: -20~55		
Operating Temperature (Recommended) (°C)	15~30		
Storage Temperature (°C)	-10~55		
Storage Temperature (Recommended) (°C)	20~30		
Humidity	5%~85%RH		
Altitude	≤2000m		
IP Rating Of Enclosure	IP20		
Communication	CAN, RS485		
Dimensions (W/D/H,mm)	Rack	551*590*2100	
Mounting Method	Rack mounting		
Cooling Method	Natural convection		
Weight Approximate (kg)	665		
Cycle Life	25±2°C,0.5C/ 0.5C, ≥6000		
Product Warranty	10 years warranty		
Certificates	IEC62619, CE, UN38.3, MSDS		

Note:

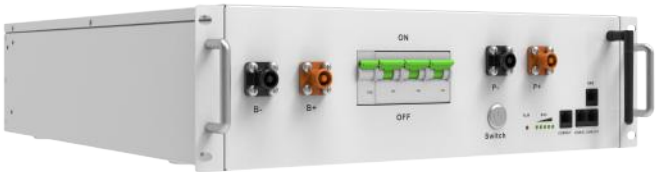
1. Value for Battery Cell Only (Depth of Discharge 90%). Actual usable energy at the AC output may vary by condition, such as the battery converter, inverter efficiency and temperature.
2. Lepton Energy recommends 50A@2.5kW for maximum battery module lifetime. Max dis-/charge current and power derating will occur related to temperature and SOC.

SYSTEM COMPONENTS

EH-B0P

Power Control Box

Operating Voltage	80-750Vdc
Recommended Charge/ Discharge Current	50A
Max.Charge/ Discharge Current	100A
Operating Temperature Range	-20~65°C
Ingress Protection Rating	IP20
Dimensions (W/D/H)	434*570*135mm
Weight Approximate	12kg



EH-B05

5.12 kWh Battery Module

Battery Type	LFP(LiFePO ₄)
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Rated Energy	5.12kWh
Max. Charge/ Discharge Current	100A
Charge Temperature	0~55°C
Discharge Temperature	-20°C~55°C
Ingress Protection Rating	IP20
Dimensions (W/D/H)	434*570*135mm
Weight Approximate	49kg



Preview



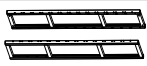
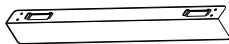
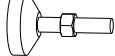
Packing list of EH-B05

No.	Picture	Description	Quantity
1		M6x16 Combination Screw	4
2		Serial Cable/ L165mm, Red, 25mm²	1
3		Communication Cable To Battery/ L160mm, RJ45 Plug	1

Packing list of EH-B0P

No.	Picture	Description	Quantity
1		M6x16 Combination Screw	6
2		Positive Connector/ Orange	1
3		Negative Connector/ Black	1
4		Power Cable-positive To Battery/ L190mm, Red, 25mm²	1
5		Power Cable-negative To Battery/ L2265mm, Black, 25mm²	1
6		Communication Cable To Battery/ L160mm, RJ45 Plug	1
7		Communication Cable To PCS/ L3000mm, RJ45 Plug	1
8		Ground Wire/ L1000mm, Yellow Green, 6mm²	1
9		Terminal Resistor	2
10		User Manual	1

Packing list of rack accessory

No.	Picture	Description	Quantity
1		Side Beam	2
2		Top/ Bottom Beam	4
3		Diagonal Brace	3
4		Laminate	26
5		Base	4
6		Rack Fastener 1	8
7		Rack Fastener 2	8
8		M4x12 Flange Screw	108
9		M6x12 Combination Screw	59