LEAPTON SOLAR

SWITCH YOUR LIFE

ENERGY STORAGE SOLUTIONS





LEAPTON ENERGY

HIGH-VOLTAGE ESS

EH-B05

VERSION: 2026 V1

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

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, 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 in parallel for expanding capacity and power.

Inherently safer by design
Built with ultra-stable LiFePO4 cells and stacking technology, with multi-level safety to prevent thermal runaway.

LEAPTON SOLAR

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Model		EH-B05-51.2/153	EH-B05-51.2/204	EH-B05-51.2/256	EH-B05-51.2/307	EH-B05-51.2/358
Cell Chemistry		LFP($LiFePO_4$)				
Module Energy (kWh)		5.12				
Module Nominal Voltage (V)		51.2				
Module Capacity (Ah)		100				
Battery Module Qty In Series (Optional)		3	4	5	6	7
Cell Configuration		48S1P	64S1P	80S1P	96S1P	112S1P
System Nominal Voltage (V)		153.6	204.8	256	307.2	358.4
System Operating Voltage (V)		134.4~175.2	179.2~233.6	224~292	268.8~350.4	313.6~408.8
System Energy (kWh)		15.36	20.48	25.6	30.72	35.84
System Usable Energy (kWh)		13.82	18.43	23.04	27.64	32.25
Charge/Discharge Current (A)	Recommended	50				
	Max	100				
Operating Temperature (℃)		Charge: 0~55, Discharge: -20~55				
Operating Temperature (Recommended) (°C)		15~30				
Storage Temperature (°C)		-10~55				
Storage Temperature (Recommended) (°C)		20~30				
Dimensions [W*D*H] [mm]		434*570*600	434*570*735	434*570*870	434*570*1005	434*570*1140
Weight Approximate (kg)		159	208	257	306	355
Communication		CAN, RS485				
Humidity		5%~85%RH				
Altitude		⩽2000m				
IP Rating of Enclosure		IP20				
Mounting Method		Self-stacking installation				
Cooling Method		Natural convection				
Cycle Life		25 ± 2°C , 0.5C / 0.5C , EOL70% ⩾ 6000				
Product Warranty		10 years warranty				
Certificates		IEC62619, CE, UN38.3, MSDS				
40HQ Container Capacity (pcs)		480(Battery)+40(PCU)+40(Accessaries)				

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. Leapton Energy recommends 50A@2.56kW for maximum battery module lifetime.Max dis-/charge current and power derating will occur related to temperature and SOC.

Model		EH-B05-51.2/409	EH-B05-51.2/460	EH-B05-51.2/512	EH-B05-51.2/563	EH-B05-51.2/614
Cell Chemistry		LFP($LiFePO_4$)				
Module Energy (kWh)		5.12				
Module Nominal Voltage (V)		51.2				
Module Capacity (Ah)		100				
Battery Module Qty In Series (Optional)		8	9	10	11	12
Cell Configuration		128S1P	144S1P	160S1P	176S1P	192S1P
System Nominal Voltage (V)		409.6	460.8	512	563.2	614.4
System Operating Voltage (V)		358.4~467.2	403.2~525.6	448~584	492.8~642.4	537.6~700.8
System Energy (kWh)		40.96	46.08	51.2	56.32	61.44
System Usable Energy (kWh)		36.86	41.47	46.08	50.68	55.29
Charge/Discharge Current (A)	Recommended	50				
	Max	100				
Operating Temperature (℃)		Charge: 0~55, Discharge: -20~55				
Operating Temperature (Recommended) (°C)		15~30				
Storage Temperature (°C)		-10~55				
Storage Temperature (Recommended) (°C)		20~30				
Dimensions [W*D*H] [mm]		434*570*1275	434*570*1410	434*570*1545	434*570*1680	434*570*1815
Weight Approximate (kg)		404	453	502	551	600
Communication		CAN, RS485				
Humidity		5%~85%RH				
Altitude		⩽2000m				
IP Rating of Enclosure		IP20				
Mounting Method		Self-stacking installation				
Cooling Method		Natural convection				
Cycle Life		25 ± 2°C , 0.5C / 0.5C , EOL70% ⩾ 6000				
Product Warranty		10 years warranty				
Certificates		IEC62619, CE, UN38.3, MSDS				
40HQ Container Capacity (pcs)		480(Battery)+40(PCU)+40(Accessaries)				

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. Leapton Energy recommends 50A@2.56kW for maximum battery module lifetime.Max dis-/charge current and power derating will occur related to temperature and SOC.

EH-B0P

Power Control Box

Operating Voltage	80-750Vdc
Recommend 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







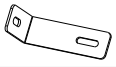
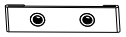
Packing list of EH-B05

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 self-stacking accessories

No.	Picture	Description	Quantity
1		Wall Bracket	10
2		M6x12 Combination Screw	85
3		M6 Nut	12
4		Base	1
5		Right Limit Plate	13
6		Left Limit Plate	13
7		Ear Mounting Plate	26
8		Expansion Bolt M6x70	10
9		Cable Tie	5

1. Lock the joint between battery and wall bracket with expansion bolts M6x70 and M6 Nut.
2. The cable tie is used to secure the power cable-negative with plate.