



LEAPTON
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ENERGY STORAGE SOLUTIONS



LEAPTON ENERGY

COMMERCIAL ESS EH-A16

VERSION: 2025 V3

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



CONVENIENCE

The battery modules are placed on ground supports, each of which can bear the weight of up to four stacked battery layers. This design facilitates installation, commissioning, and maintenance.



SMART BALANCING

It features multiple protection functions, including over-discharge, overcharge, overcurrent, and over-temperature or low-temperature protection. Each battery module is equipped with a Battery Management System (BMS) to ensure optimal charge and discharge distribution, extending battery life.



SCALABILITY

The system can accommodate 6 to 16 modules, offering excellent scalability and easy adaptation to specific environments.



ECO-FRIENDLY

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



WIDE TEMPERATURE

Operating temperature range is 0° C to 55° C for charging, and -20° C to 55° C for discharging, with excellent discharge performance and long cycle life.



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Model	EH-A16-51.2/307		EH-A16-51.2/358		EH-A16-51.2/409		EH-A16-51.2/460		EH-A16-51.2/512		EH-A16-51.2/563		
Cell Chemistry	LFP(LiFePO ₄)												
Module Energy (kWh)	16												
Module Nominal Voltage (V)	51.2												
Module Capacity (Ah)	314												
Battery Module Qty In Series (Optional)	6		7		8		9		10		11		
Cell Configuration	96S1P		112S1P		128S1P		144S1P		160S1P		176S1P		
System Nominal Voltage (V)	307.2		358.4		409.6		460.8		512		563.2		
System Operating Voltage (V)	268.8~350.4		313.6~408.8		358.4~467.2		403.2~525.6		448~584		492.8~642.4		
System Energy (kWh)	96		112		128		144		160		176		
System Usable Energy (kWh)	86.4		100.8		115.2		129.6		144		158.4		
Charge/Discharge Current	Recommended		100										
	Max		160										
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												
Dimensions [W*D*H] [mm]	Battery Moudle		560*825*290										
	PCU Box		560*765*200										
	System		1400±20*825±20*1050±20		1400±20*825±20*1140±20		1400±20*825±20*1340±20		1960±20*825±20*1050±20		1960±20*825±20*1140±20		1960±20*825±20*1140±20
Weight Approximate (kg)	Battery Moudle		130										
	PCU Box		23										
	System		880±20		1010±20		1140±20		1270±20		1400±20		1530±20
Communication	CAN, RS485												
Humidity	5%~85%RH												
Altitude	≤2000m												
IP Rating Of Enclosure	IP20												
Mounting Method	Rack mounted												
Cooling Method	Smart fan cooling												
Cycle Life	25 ± 2°C , 0.5C / 0.5C , EOL70% ≥ 6000												
Product Warranty	10 years warranty												
Certificates	IEC62619, CE, UN38.3, MSDS												

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 100A@5kW for maximum battery module lifetime. Max dis-/charge current and power derating will occur related to temperature and SOC.

Model	EH-A16-51.2/614		EH-A16-51.2/665		EH-A16-51.2/716		EH-A16-51.2/768		EH-A16-51.2/819	
Cell Chemistry	LFP(LiFePO ₄)									
Module Energy (kWh)	16									
Module Nominal Voltage (V)	51.2									
Module Capacity (Ah)	314									
Battery Module Qty In Series (Optional)	12		13		14		15		16	
Cell Configuration	192S1P		208S1P		224S1P		240S1P		256S1P	
System Nominal Voltage (V)	614.4		665.6		716.8		768		819.2	
System Operating Voltage (V)	537.6~700.8		582.4~759.2		627.2~817.6		672~876		716.8~934.4	
System Energy (kWh)	192		208		224		240		256	
System Usable Energy (kWh)	172.8		187.2		201.6		216		230	
Charge/Discharge Current (A)	Recommended		100							
	Max		160							
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									
Dimensions [W*D*H] [mm]	Battery Module		560*825*290							
	PCU Box		560*765*200							
	System		2520±20*825±20*1050±20	2520±20*825±20*1140±20	2520±20*825±20*1140±20	2520±20*825±20*1140±20	2520±20*825±20*1340±20	2520±20*825±20*1340±20	2520±20*825±20*1340±20	2520±20*825±20*1340±20
Weight Approximate (kg)	Battery Module		130							
	PCU Box		23							
	System		1660±20	1790±20	1920±20	2050±20	2180±20	2180±20	2180±20	2180±20
Communication	CAN, RS485									
Humidity	5%~85%RH									
Altitude	≤2000m									
IP Rating Of Enclosure	IP20									
Mounting Method	Rack mounted									
Cooling Method	Smart fan cooling									
Cycle Life	25 ± 2°C , 0.5C / 0.5C , EOL70% ≥ 6000									
Product Warranty	10 years warranty									
Certificates	IEC62619, CE, UN38.3, MSDS									

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 100A@5kW for maximum battery module lifetime. Max dis-/charge current and power derating will occur related to temperature and SOC.

EH-F0P

Power Control Box

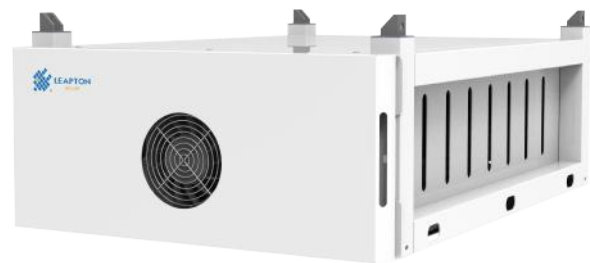
Operating Voltage	250~1000Vdc
Recommended Charge/Discharge Current	100A
Max.Charge/Discharge Current	160A
Operating Temperature Range	-20~55°C
Ingress Protection Rating	IP20
Dimensions (W/D/H)	560±5*765±5*200±5mm
Weight Approximate	23±2kg



EH-A16

16 kWh Battery Module

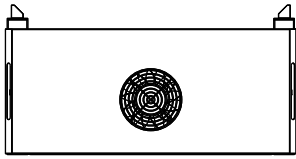
Battery Type	LFP(LiFePO ₄)
Nominal Voltage	51.2Vdc
Rated Capacity	314Ah
Rated Energy	16kWh
Max. Charge/Discharge Current	160A
Charge Temperature	0~55°C
Discharge Temperature	-20°C~55°C
Ingress Protection Rating	IP20
Dimensions (W/D/H)	560±5*825±5*290±5mm
Weight Approximate	130±5kg



Preview



Packing list of EH-A16



①



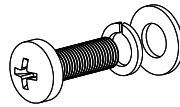
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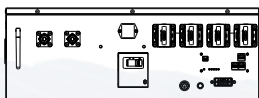
④



⑤

No.	Description	Quantity
①	16kWh Battery	1
②	Communication Cable To Battery/ L360mm	1
③	Copper Bar	1
④	M8X16 Combination Screw	2
⑤	M4X16 Screw / Spring Washer / Flat Washer	4

Packing list of EH-F0P



①



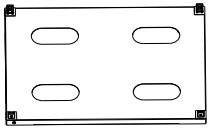
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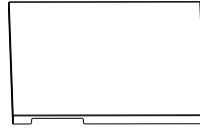
③

No.	Description	Quantity
①	PCU	1
②	M8X16 Combination Screw	6
③	M6X20 Combination Screw	1

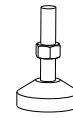
Packing list of Accessory Bag



①



②



③



④



⑤



⑥



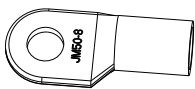
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⑨



⑩



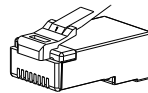
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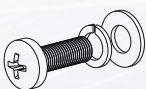
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⑭



⑮



⑯



⑰



⑱

No.	Description	Quantity
①	Pedestal	4
②	Lid	3
③	Footed Glass	16
④	Pack Terminal Resistor	1
⑤	AC Power Cord	1
⑥	Communication Cable To Battery/ L1000mm	3
⑦	Serial Cable/L1000mm, Red, 1AWG, SC50-8	3
⑧	Power Cable-positive To Battery/L3500mm, Red, 1AWG	1
⑨	Power Cable-negative To Battery/L230mm, Black, 1AWG	1
⑩	SC50-8	6
⑪	Ground Wire/ L300mm, Yellow Green, 10AWG	3
⑫	Ground Wire/ L1500mm, Yellow Green, 10AWG	1
⑬	Network Cable	1
⑭	Parallel Connection Terminal Resistor	1
⑮	M6X20 Combination Screw	7
⑯	M4X16 Screw/ Spring Washer/ Flat Washer	20
⑰	User Manual	1
⑱	Cable Tie	12