



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.



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 Module	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 Module	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 Moudle	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
Weight Approximate (kg)	Battery Moudle	130				
	PCU Box	23				
	System	1660±20	1790±20	1920±20	2050±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

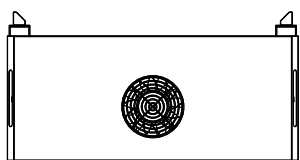


Preview





Packing list of EH-A16



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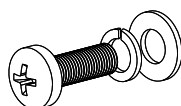
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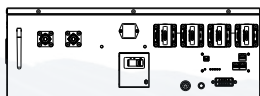
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No.	Description	Quantity
①	16kWh Battery	1
②	Communication Cable To Battery/ L360mm	1
③	Copper Bar	1
④	M8X16 Combination Screw	2
⑤	M4X16 Screw / Spring Washer / Flat Washer	4

Packing list of EH-F0P



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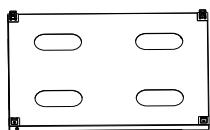


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No.	Description	Quantity
①	PCU	1
②	M8X16 Combination Screw	6
③	M6X20 Combination Screw	1



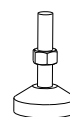
Packing list of Accessory Bag



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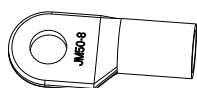
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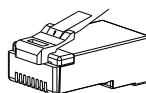
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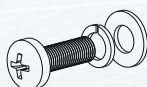
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No.	Description	Quantity
①	Pedestal	4
②	Lid	3
③	Footed Glass	16
④	Pack Terminal Resistor	1
⑤	AC Power Cord	1
⑥	Communication Cable To Battery/ L1000mm	3
⑦	Serial Cable/L1000mm, Red, 1AWG, SC50-8	3
⑧	Power Cable-positive To Battery/L3500mm, Red, 1AWG	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