



LEAPTON
SOLAR

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ENERGY STORAGE SOLUTIONS

VERSION: 2026 V2

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

MODULAR DESIGN



LEAPTON ENERGY **HIGH-VOLTAGE ESS** **EH-H05**



Scalable Energy Capacity

Supports up to 5 clusters in parallel, expandable from 15.36kWh to 384kWh for flexible system scaling.



Plug-and-Play Installation

Cable-free connection between modules with a stackable design for fast and easy installation.



Intelligent Thermal Management

Independent temperature control with heating function, enabling stable operation from -20° C to 55° C.



Advanced Safety Protection

IP65 protection with built-in fire suppression in each module for enhanced system safety.



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Model		EH-H05-51.2/153	EH-H05-51.2/204	EH-H05-51.2/256	EH-H05-51.2/307	EH-H05-51.2/358	EH-H05-51.2/409
Cell Chemistry		LFP(LiFePO ₄)					
Module Energy (kWh) ¹		5.12					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		100					
Battery Module Qty In Series (Optional)		3	4	5	6	7	8
Cell Configuration		48S1P	64S1P	80S1P	96S1P	112S1P	128S1P
System Nominal Voltage (V)		153.6	204.8	256	307.2	358.4	409.6
System Operating Voltage (V)		134.4~172.8	179.2~230.4	224~288	268.8~345.6	313.6~403.2	358.4~460.8
System Energy (kWh)		15.36	20.48	25.6	30.72	35.84	40.96
System Usable Energy (kWh)		13.82	18.43	23.04	27.64	32.25	36.86
Charge/Discharge Current (A) ²	Recommended	50					
	Max	100					
Charging Temperature (°C) ³		0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)
Discharging Temperature (°C)		-20~55	-20~55	-20~55	-20~55	-20~55	-20~55
Operating Temperature (Recommended) (°C)		15~30					
Storage Temperature (°C)		-10~55					
Storage Temperature (Recommended) (°C)		20~30					
Dimensions [W*D*H] [mm]		610±5*390±5*795±5	610±5*390±5*970±5	610±5*390±5*1145±5	610±5*390±5*1320±5	610±5*390±5*1495±5	610±5*390±5*1670±5
Weight Approximate (kg)		170±2	218±2	266±2	314±2	362±2	410±2
Communication		CAN, RS485					
Humidity		5%~85%RH					
Altitude		≤2000m					
IP Rating of Enclosure		IP65					
Mounting Method		Self-stacking installation					
Cooling Method		Natural convection					
Cycle Life		25±2°C, 80%DOD, EOL70% ≥ 8000					
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 50A@2.56kW for maximum battery module lifetime. Max dis-/charge current and power derating will occur related to temperature and SOC.
3. The charging temperature of products with heating function is -20°C~55°C

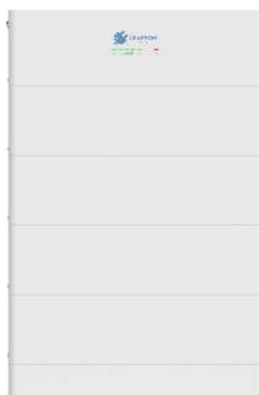
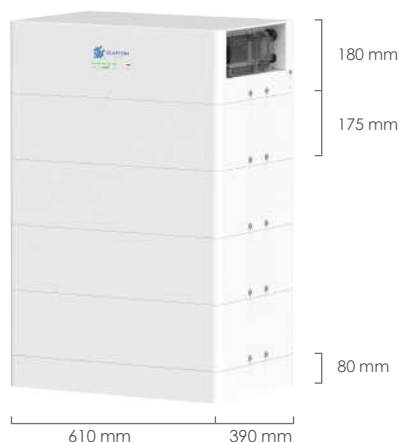


Model	EH-H05-51.2/460	EH-H05-51.2/512	EH-H05-51.2/563	EH-H05-51.2/614	EH-H05-51.2/665	EH-H05-51.2/716	EH-H05-51.2/768
Cell Chemistry	LFP(LiFePO ₄)						
Module Energy (kWh) ¹	5.12						
Module Nominal Voltage (V)	51.2						
Module Capacity (Ah)	100						
Battery Module Qty In Series (Optional)	9	10	11	12	13	14	15
Cell Configuration	144S1P	160S1P	176S1P	192S1P	208S1P	224S1P	240S1P
System Nominal Voltage (V)	460.8	512	563.2	614.4	665.6	716.8	768
System Operating Voltage (V)	403.2~518.4	448~576	492.8~633.6	537.6~691.2	582.4~748.8	627.2~806.4	672~864
System Energy (kWh)	46.08	51.2	56.32	61.44	66.56	71.68	76.8
System Usable Energy (kWh)	41.47	46.08	50.68	55.29	59.9	64.51	69.12
Charge/Discharge Current (A) ²	Recommended	50					
	Max	100					
Charging Temperature (°C) ³	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)	0~55 (-20~55)
Discharging Temperature (°C)	-20~55	-20~55	-20~55	-20~55	-20~55	-20~55	-20~55
Operating Temperature (Recommended) (°C)	15~30						
Storage Temperature (°C)	-10~55						
Storage Temperature (Recommended) (°C)	20~30						
Dimensions [W*D*H] [mm]	610±5*390± 5*1845±5	610±5*390± 5*2020±5	610±5*390± 5*2195±5	610±5*390± 5*2370±5	610±5*390± 5*2545±5	610±5*390± 5*2720±5	610±5*390± 5*2895±5
Weight Approximate (kg)	458±2	506±2	554±2	602±2	650±2	698±2	746±2
Communication	CAN, RS485						
Humidity	5%~85%RH						
Altitude	≤2000m						
IP Rating of Enclosure	IP65						
Mounting Method	Self-stacking installation						
Cooling Method	Natural convection						
Cycle Life	25±2°C, 80%DOD, EOL70% ≥ 8000						
Product Warranty	10 years warranty						
Certificates	IEC62619, CE, UN38.3, MSDS						

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Preview



Packing list of Power Control Unit is as follows

No.	Picture	Description	Quantity
1		Power control unit	1
2		Base support	1
3		Positive plug	1
4		Negative plug	1
5		Heating AC connector	1
6		RJ45 waterproof sleeve	3
7		Parallel connection terminal resistor	1
8		SC6-6	1
9		M5*12 screw	10 (3 for spare)
10		M6*70 expansion screw	6
11		Fixed bracket	2
12		User manual	1

Packing list of Battery is as follows

No.	Picture	Description	Quantity
1		Battery	1
2		M5*12 screw	4