

LOW VOLTAGE ESS (LV)

HLS-1X5/10/15/20K



Flexible scalability

5 kWh modular design, scalable from 5 kWh to 60 kWh



Smart balance

Balance between old lower capacity and new battery module



Quick installation

Plug & Play Connection



Harsh environment

-10 °C ~ 50 °C



Safe

LFP prismatic cell and 3-layer safety protection & 5 patented technologies

MODEL	HLS-1X5K	HLS-1X10K	HLS-1X15K	HLS-1X20K
Input DC (PV side)				
Cell type	LiFePO ₄ Prismatic Cell			
Battery module	B051100P03-H (5.12 kWh, 51.2 V, 50 kg)			
Number of battery modules	1	2	3	4
Nominal energy	5 kWh	10 kWh	15 kWh	20 kWh
Usable energy (90% DOD)	4.5 kWh	9 kWh	13.5 kWh	18 kWh
Nominal charge/Discharge current	50 A / 50 A	100 A / 100 A	150 A / 150A	200 A / 200A
Max charge/Discharge current	100 A / 100 A 1	80 A / 180 A	200 A / 200 A	200 A / 200 A
Nominal voltage	51.2 V			
Operating voltage range	44.8 ~ 55.2 V			
Communication	CAN / RS485 / WiFi			
Protection function	Charge overvoltage, discharge under-voltage, overcurrent, over-temperature, short circuit protection			
Cycle life	>6000 times (25 °C, 0.5 °C / 0.5 °C, 90% DOD, 70% EOL)			
Scalability	max. 3 systems in parallel			
Protection rating	IP65			
Cooling type	Natural convection			
Working temperature ¹	Charging: [-10, +50] °C			
	Discharging: [-20, +50] °C			
Working environment humidity	10% ~ 95% (non-condensation)			
Working altitude	< 2000 m (Derating over 2000 m)			
Warranty	10 Years			
Operating conditions	Indoor or outdoor			
Installation	Ground Installation			
Certifications	UL1973, FCC, UL9540, IEC62619, CE			
Transportation	UN 38.3			
size WxHxD (mm)	573 * 597 * 189	573 * 912 * 189	573 * 1227 * 189	573 * 1542 * 189
Weight	65 kg	115 kg	165 kg	215 kg

¹ to ensure maximum performance, installation in a temperature-controlled environment between 15°C and 40°C is recommended (< 15°C and > 40°C the batteries protect themselves by limiting the current)