

SunESS H

Smart Stacked Energy
Storage System



Features



Safe and Long-life
LiFePO₄ (LFP) Technology



Built-in Protection
Features



High Voltage (~400V)
Enabled by Built-in DC-DC



Optimized for Both Grid-
tied and Off-grid Application



Versatile Configuration
(5–60kWh), Mixed Use of
Old and New, Upgrade at
Any Time



Supported by Market-
leading PV-hybrid or
Battery-only Inverter
(more than 10 brands)



Built-in Display



Built-in Wi-Fi



Electrical Characteristics

Model	SunESS 5H	SunESS 10H	SunESS 15H	SunESS 20H
Nominal Energy	5kWh	10kWh	15kWh	20kWh
Usable Energy (90% DOD)	4.5kWh	9kWh	13.5kWh	18kWh
Rated Voltage	409.6V	409.6V	409.6V	409.6V
Charge/Discharge Cut Off Voltage	350V~450V	350V~450V	350V~450V	350V~450V
Roundtrip Efficiency	>95%	>95%	>95%	>95%
Rated Charge/Discharge Power	2.5kW	5kW	7.5kW	10kW
Max. charge/Discharge Power	3.5kW@10s	7kW@10s	10.5kW@10	14kW@10s
Communication Interface	CAN 2.0/RS485/Wi-Fi/LAN			
DC Disconnect	Circuit Breaker, 50A, 410V Rating			
Connection Method	Quick Plug and Unplug Terminals			
User Interface	Display Battery Running Status, SOC, Alarm Information, Wifi Status, Heater Status, etc.			
Protection Features	Charging Overvoltage Protection, Discharge Under-voltage Protection, Over Current Protection, Short Circuit Protection, High and Low Temperature Protection, DC Reverse Polarity Protection, etc			
Scalability	Max. 3 in Parallel, Max. 60 kWh			

Operating Conditions

Installation Location	Outdoor or Indoor
Operating Temperature	14°F to 122°F (-10°C to 50°C)
Operating Temperature (Recommended)	59°F to 86°F (15°C to 30°C)
Storage Temperature	-22°F to 140°F (-30°C to 60°C)
Humidity	10% to 95%,non condensation
Dimensions (W*H*D,mm)	633*(597/912/1227/1542)*189
Weight	65kg,115kg,165kg,215kg
Enclosure Rating	IP55
Altitude	<2000m
Cooling	Natural Convection
Warranty	7 Years*
Inverter	Refer to Inverter Compatibility List by Luminey

Certificates

Safety	IEC62619/CE/UL1973
Transportation	UN38.3

*Warranty 6+1 years (+1 year warranty is extended upon the installation of Battery Wi-Fi Module and Connected to the Internet)

