



FlexHome-H

13.99-40kWh Stackable High-Voltage Energy Storage System (ESS)

High-Voltage Stackable Storage
Efficiency for Homes

- Uses A+ grade cells, $\geq 8,000+$ cycle life ^①
- Standard with five-layer hardware redundancy safety protection
- Supports a max. 21A string input current, perfectly matching high-power PV modules
- Supports 160% usable PV power, maximizing solar energy utilization
- Supports 200% overload in off-grid mode, ensuring stable startup of loads
- Supports seamless on-grid and off-grid switching with transfer times $< 10\text{ms}$
- Designed for all environments: IP66 protection & C5-M anti-corrosion. Optional intelligent heating enables operation down to -20°C
- High-voltage stackable system: flexible installation and high efficiency
- Supports up to 4 units in parallel, expanding capacity up to 160kWh
- Solis AI – smart energy management with generator support
- Supports OTA remote upgrades for efficient operation and maintenance

FlexHome-H 13.99-40 kWh ESS



DATASHEET

FlexHome-(13.99-37.32)kWh-H

Models	13.99kWh	18.66kWh	23.32kWh	27.99kWh	32.65kWh	37.32kWh
Performance						
Battery type	LiFePO ₄					
Nominal energy	15 kWh	20 kWh	25 kWh	30 kWh	35 kWh	40 kWh
Operating voltage	134.4-172.8 V	179.2-230.4 V	224-288 V	268.8-345.6 V	313.6-403.2 V	358.4-460.8 V
Cell capacity	100 Ah					
Recommended charge & discharge current rate	0.5 C					
Max. charge & discharge current rate	0.5 C					
Recommended charge & discharge current	50 A					
Max. discharge current	50 A					
Depth of discharge	Max. 100 % DOD					
Display	SOC indicator, Status indicator					
Communication	CAN/RS485					
Cycle life ^①	≥8000					
Protection						
Over/under voltage protection	Yes					
Over current protection	Yes					
Over/under temperature protection	Yes					
DC breaker	Yes					
DC overcurrent fuses	Yes					
Aerogel thermal insulation plate	Yes					
Fire protection function	Yes					
Explosion release valves	Yes					
General Specification						
Dimensions (W × H × D)	800 × 857 × 285 mm	800 × 1046 × 285 mm	800 × 1235 × 285 mm	800 × 1424 × 285 mm	800 × 1613 × 285 mm	800 × 1802 × 285 mm
Weight	180 kg	230 kg	280 kg	330 kg	380 kg	430 kg
Cooling	Natural convection					
Ingress protection	IP66					
Anti-corrosion class	C5M					
Operating ambient temperature range	-20~55 °C (Smart heating function)					
Storage temperature range	-10~45 °C					
Relative humidity range	5~95 %					
Max. operating altitude	4000 m					
Installation method	Floor standing / Wall-mounted					
Scalability	Up to 4 units in parallel					
Compatible inverters	S6-EH3P(5-10)K-H-AU/RHI-3P(5-10)K-HVES-5G/S6-EH3P(12-20)K-H-AU					
Standard Compliance						
Certificates	CEC, IEC 62619, IEC 63056, ISO13849, VDE 2510-50, UN 38.3, EN/IEC61000-6-1/2/3/4, IEC 60730-1, IEC/EN 62477-1:2022, IEC 60529(IP), IEC62040, RoHS, REACH					

DATASHEET

FlexHome-(15-40)kWh-H

Models	15kWh	20kWh	25kWh	30kWh	35kWh	40kWh
Performance						
Battery type	LiFePO ₄					
Nominal energy	15 kWh	20 kWh	25 kWh	30 kWh	35 kWh	40 kWh
Operating voltage	134.4-172.8 V	179.2-230.4 V	224-288 V	268.8-345.6 V	313.6-403.2 V	358.4-460.8 V
Cell capacity	100 Ah					
Recommended charge & discharge current rate	0.5 C					
Max. charge & discharge current rate	0.5 C					
Recommended charge & discharge current	50 A					
Max. discharge current	50 A					
Depth of discharge	Max. 100 % DOD					
Display	SOC indicator, Status indicator					
Communication	CAN/RS485					
Cycle life ^①	≥8000					
Protection						
Over/under voltage protection	Yes					
Over current protection	Yes					
Over/under temperature protection	Yes					
DC breaker	Yes					
DC overcurrent fuses	Yes					
Aerogel thermal insulation plate	Yes					
Fire protection function	Yes					
Explosion release valves	Yes					
General Specification						
Dimensions (W × H × D)	800 × 857 × 285 mm	800 × 1046 × 285 mm	800 × 1235 × 285 mm	800 × 1424 × 285 mm	800 × 1613 × 285 mm	800 × 1802 × 285 mm
Weight	180 kg	230 kg	280 kg	330 kg	380 kg	430 kg
Cooling	Natural convection					
Ingress protection	IP66					
Anti-corrosion class	C5M					
Operating ambient temperature range	-20~55 °C (Smart heating function)					
Storage temperature range	-10~45 °C					
Relative humidity range	5~95 %					
Max. operating altitude	4000 m					
Installation method	Floor standing / Wall-mounted					
Scalability	Up to 4 units in parallel					
Compatible inverters	S6-EH3P(5-10)K-H-AU/RHI-3P(5-10)K-HVES-5G/S6-EH3P(12-20)K-H-AU					
Standard Compliance						
Certificates	CEC, IEC 62619, IEC 63056, ISO13849, VDE 2510-50, UN 38.3, EN/IEC61000-6-1/2/3/4, IEC 60730-1, IEC/EN 62477-1:2022, IEC 60529(IP), IEC62040, RoHS, REACH					

① Provided by battery cell manufacturer based on cell test condition of 25°C, 0.2C charge and discharge rate, 90% DOD and SOH = 70%.