SolisStorage

FlexHome-L

5-40kWh Stackable Low-Voltage Energy Storage System (ESS)

Low-Voltage Stackable Storage
Safe, Flexible & Expandable

- Uses A+ grade cells, ≥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 <10ms
- Designed for all environments: IP66 protection & C5-M anti-corrosion. Optional intelligent heating enables operation down to -20°C
- Low-voltage stackable system: flexible installation, strong safety protection
- 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-L 5-40 kWh ESS



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DATASHEET

FlexHome-(5-40)kWh-L

Models	5kWh	10kWh	15kWh	20kWh	25kWh	30kWh	35kWh	40kWh
Performance								
Battery type	$LiFePO_4$							
Nominal energy	5 kWh	10 kWh	15 kWh	20 kWh	25 kWh	30 kWh	35 kWh	40 kWh
Operating voltage	44.8-57.6 V							
Cell capacity	100 Ah							
Recommended charge & discharge current	50 A	100 A	150 A	200 A	210 A			
Max. discharge current	100 A	200 A	210 A	210 A	210 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 × 494 × 285 mm	800 × 683 × 285 mm	800 × 872 × 285 mm	800 × 1061 × 285 mm	800 × 1250 × 285 mm	800 × 1439 × 285 mm	800 × 1628 × 285 mm	800 × 1817 × 285 mm
Weight	76 kg	126 kg	176 kg	226 kg	276 kg	326 kg	376 kg	426 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-EH1P(3-6)K-L-EU/S5-EH1P(3-6)K-L(Smart)/S6-EH1P(3-10)K-L-PLUS/S6-EH1P(9.9-18)K03-NV-YD-L/ S6-EH2P(5-8)K02-SV-YD-L/S6-EH2P(9.6-16)K03-SV-YD-L-US/S6-EH3P(8-18)K02-NV-YD-L/S6-EH3P(7-10)K02-LV-YD-L/ S5-EA1P3K-L/S6-EA1P(3.6-6)K-L/S6-EO1P(4-6)K-48/S6-EO1P(4-5)K-48-EU							
Standard Compliance								
Certificates	IEC 62619, IEC 63056, ISO13849, VDE 2510-50, UN 38.3, EN/IEC61000-6-1/2/3/4, IEC 60730-1, IEC 60529(IP), INMETRO 140, 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%.