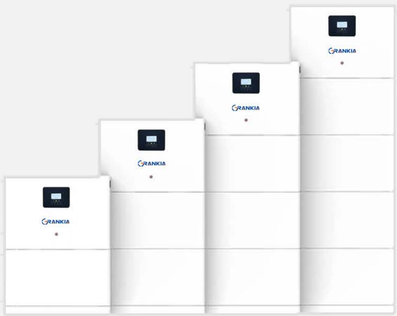
ESS 5LV SERIES ALL IN ONE ESS ENERGY STORAGE SYSTEM

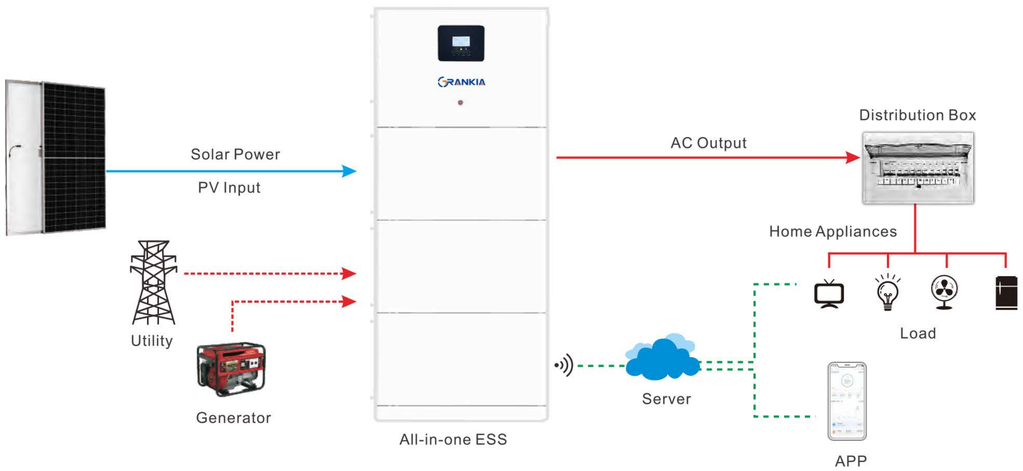
6KW Off Grid 5.12kWh/10.24kWh/15.36kWh/20.48kWh



Performance Characteristics

1. Battery module: available in capacities ranging from 5kWh to 20kWh
2. 6KVA off-grid solar inverter: PF=1.0 with pure sine wave output (AC+PV hybrid feed to the load)
3. Battery cycle life: no less than 6000 cycles at 80% DOD, 0.5C
4. Connectivity: WiFi and GPRS available for iOS and Android
5. Battery-free operation: inverter can operate without a battery
6. Factory reset: one-key restoration to factory settings
7. Automatic activation: built-in lithium battery automatic activation
8. Built-In MPPT solar charge controller: 120A maximum charge, up to 6500W
9. High PV input voltage range: supports 60-500VDC
10. Environmental protection: built-in anti-dust kit for harsh environments
11. Smart battery charge design: optimizes battery life
12. Dual output control: flexible load management

Application Diagram



Technical Specifications

MODEL	ESS-6K5LV1	ESS-6K5LV2	ESS-6K5LV3	ESS-6K5LV4
Phase	1-phase			
Maximum PV input power	6500W			
Rated output power	6200W			
Maximum solar charging current	120A			
PV Input(DC)				
Nominal DC voltage/Maximum DC voltage	360VDC/500VDC			
Start-up voltage	90VDC			
MPPT voltage range	60～450VDC			
Number of MPPT trackers/Maximum input current	1/22A			
Grid Output(AC)				
Nominal output voltage	220/230/240VAC			
Output voltage range	195.5～253VAC			
Nominal output current	27.0A			
Power factor	>0.99			
Frequency range	49～51±1Hz			
Battery Data				
Rate voltage(VDC)	51.2			
Cell combination	16S1Px1	16S1Px2	16S1Px3	16S1Px4
Rate capacity(Ah)	100	200	300	400
Energy storage(kWh)	5.12	10.24	15.36	20.48
Discharge cut-off voltage(VDC)	43.2			
Charge cut-off voltage(VDC)	58.4			
Efficiency				
Maximum conversion efficiency(solar to AC)	98%			
Two Load Output Power				
Full load	6200W			
Maximum main load	6200W			
Maximum second load(battery mode)	2067W			
Main load cut off voltage	44VDC			
Main load recovery voltage	52VDC			
AC Input				
AC start-up voltage/Auto restart voltage	120-140VAC/180VAC			
Acceptable input voltage range	90-280VAC or 170-280VAC			
Maximum AC input current	50A			
Nominal operating frequency	50/60Hz			
Surge power	10000W			
Battery Mode Output(AC)				
Nominal output voltage	220/230/240VAC			
Output waveform	Pure Sine Wave			
Efficiency(DC to AC)	94%			
Charge				
Maximum charging current (solar to AC)	120A			
Maximum AC charging current	100A			
Physical				
Dimension D×W×H(mm)	192×640×840	192×640×1180	192×640×1520	192×640×1860
Weight(Kg)	64	113	162	211
Interface				
Communication port	RS232/WiFi/GPRS			