

Sunplus Energy Storage System

EES



Sunplus ESS

Utilizing smart technology and professional industry knowledge, Sunplus is committed to providing users with integrated, reliable household and commercial energy storage solutions, effectively ensuring users' green electricity consumption and avoiding the impact of rising electricity bills or power outages. We are working tirelessly to build a photovoltaic production, energy storage and charging ecosystem, and continue to develop green energy into an independent energy source that innumerable families can rely on.

15yrs

15-year Design Life

10yrs

10-year Warranty

+

Accessory kit

System Core Strength

Systematic design,in-depth optimization and seamless connection on both sides.

Remotely fault diagnosis, upgrade and maintenance.

International brand devices, better stability.

Plug & Play for inverters connecting with batteries.

Localized design, the concept originated in Germany.

System full certificates:
Grid Standard,CE,CB,CEI0-21,UL,UN,ROSH,HSF,etc.

Comprehensive technical support and training to help quickly occupy the market.

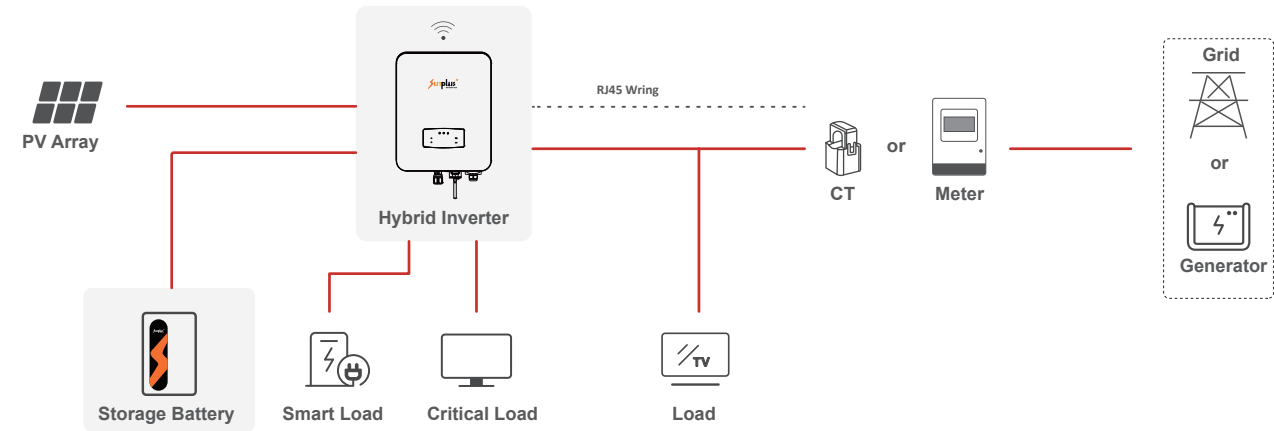
System Parameter Overview

Inverter: AF-SLSeries	
Rated Power Range(kW)	1-6
Max.DC Input Voltage(V)	550
Max.DC Input Current(A)	18.5/String
AC Output Power Range(kW)	1-6
Normal Grid Voltage(V)	220-230
Normal Grid Frequency(Hz)	50/60
Charge/Discharge Power Range(kW)	1-6
Max.Charge/Discharge Current(A)	80-120
Battery Voltage Range(V)	40-60
Battery Type	Li-ion/Lead-acid etc.
Enclosure Protect Level	IP65
Battery: SP-LV5320-W	
Normal Capacity	104Ah/5.32kWh
Normal Voltage(V)	51.2
Max.Continuous Charge/Discharge Current(A)	50/100
Communication	RS485/CAN
Enclosure Protect Level	IP55

02

System Structure

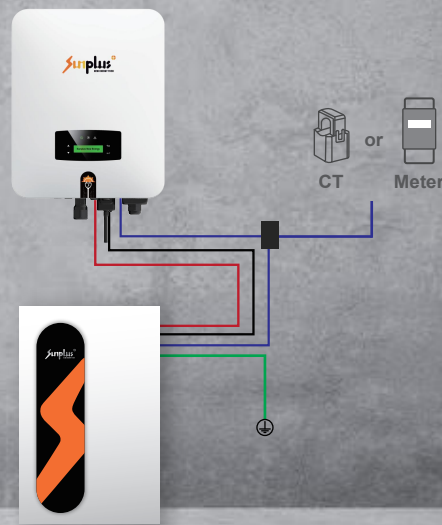
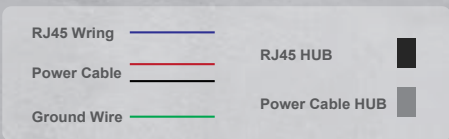
With a better understanding of the system, you will be able to respond faster when serving customers, and you can more accurately identify your customers' depth requirements.



System Application Scenarios

Individual Battery Connection

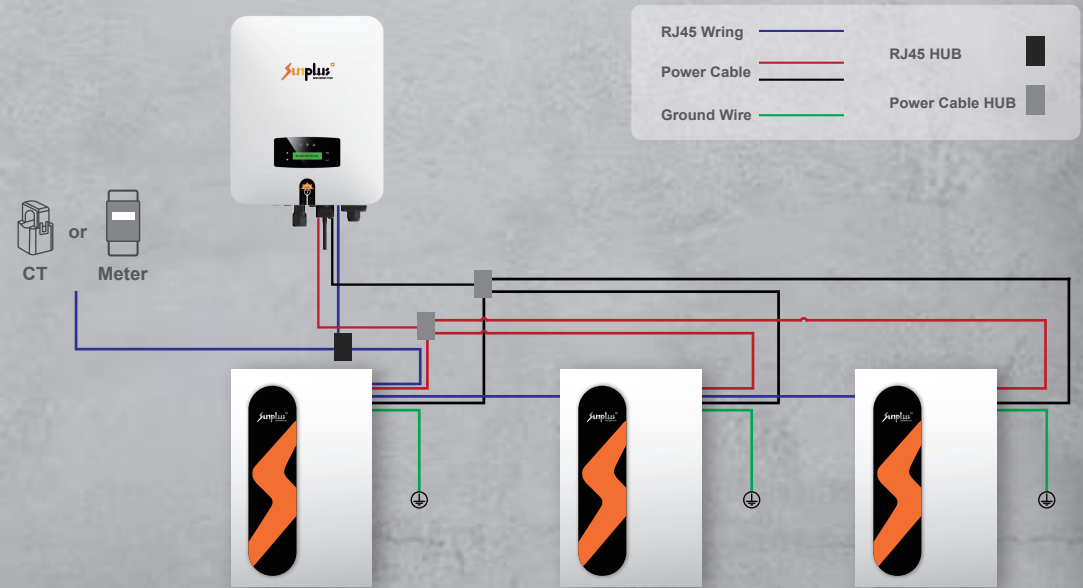
- Simple, cost-effective
- Ideal for individuals
- Easy to maintain and operate



Grounded

Multiple Battery Connection

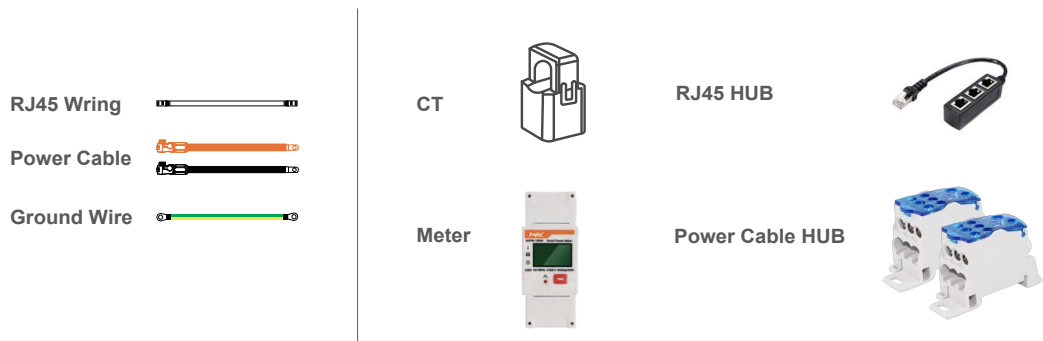
- High capacity, highly scalable
- Ideal for high energy demands
- Provides more flexible energy management



Wall-Mounted

Whether on the floor or on the wall, Sunplus LV Batteries bring energy freedom to you.

Accessory Kit



Single Phase Hybrid Inverter

1-6 kW for Low Voltage Battery

The Afore AF low voltage Series storage Inverters are designed to increase energy independence for homeowners. The power range is from 1kW to 6kW, compatible with low voltage (40-60V) batteries.

Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from the public grid.

Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

The AF low voltage Series storage inverters integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.

Max.
1.5

PV OVERSIZE

1.5 Times PV Oversize

2
MPPT

MPPT CHANNELS

Up to 2 MPPT Channels

<10
ms

UPS FUNCTION

Switch Time < 10ms

PARALLEL

Max.6 Parallel Stacking

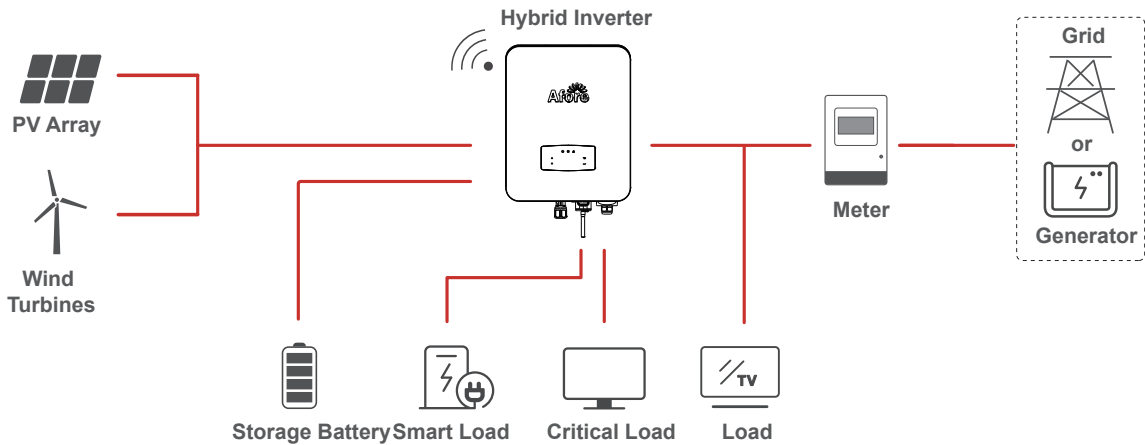
MULTIPLE INPUTS

Support Generator & Wind Turbines

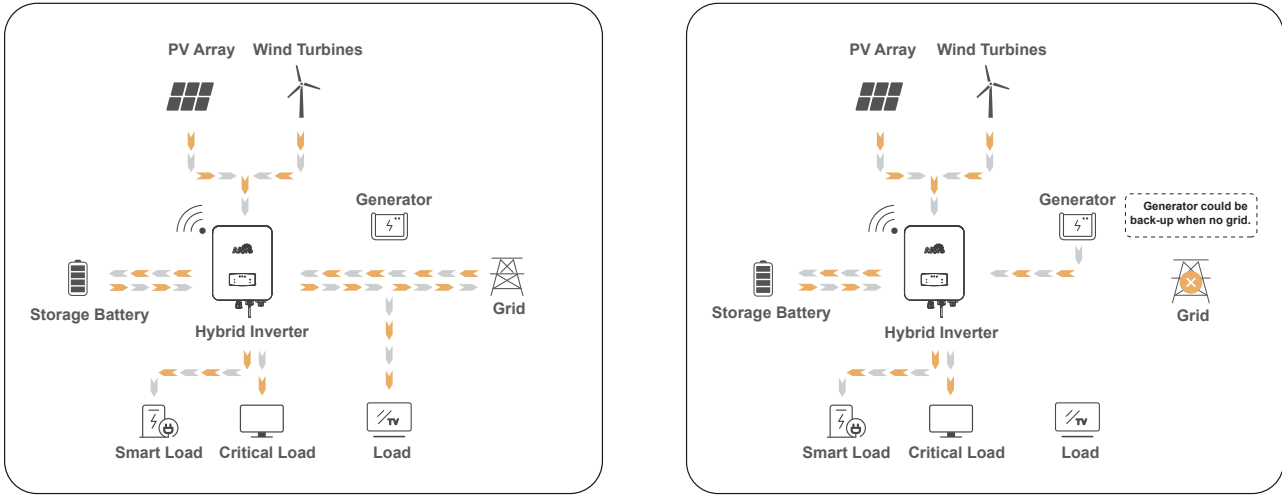


- Support for Time-of-use Optimization
- Build in Anti-feed-in Function
- Configurable Operation Modes
- Compact Size and Easy Installation
- Arc Fault Circuit Interrupter (AFCI)
- Smart Monitoring & Remote Firmware Upgrade

For New Storage System:

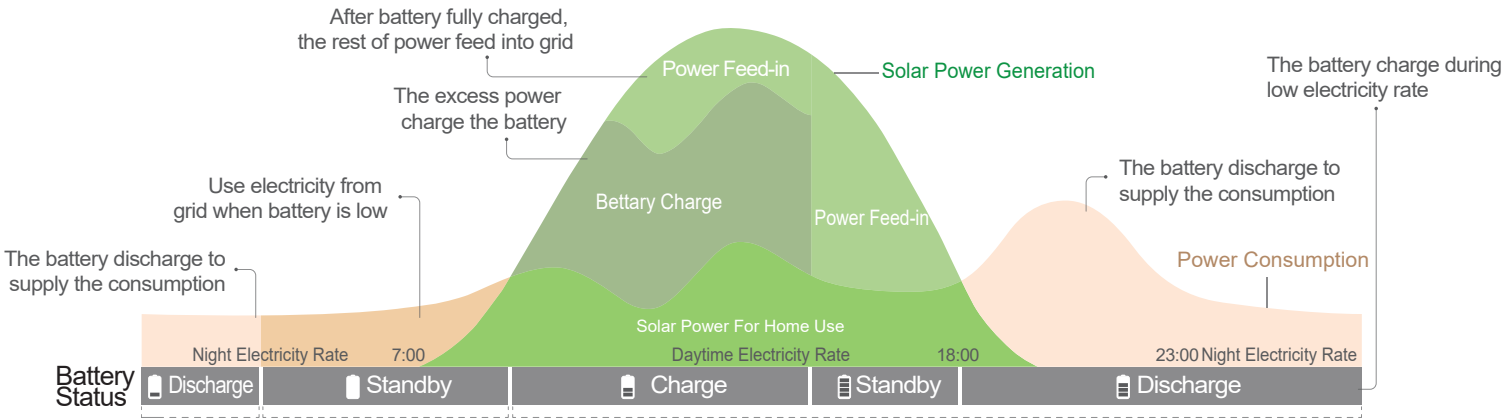


Optimizing Self-Consumption (on-grid) + Emergency Power Supply(off-grid)



Optimizing Self-Consumption Mode

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak shaving can be applied.




SP-LV5320-W Series / 5.32kWh


Residential Low Voltage Lithium Battery




CEI0-21 UK CA CE CB  




Over Current Protection




Over Charge Protection




Over Discharge Protection



Cell Balance Function



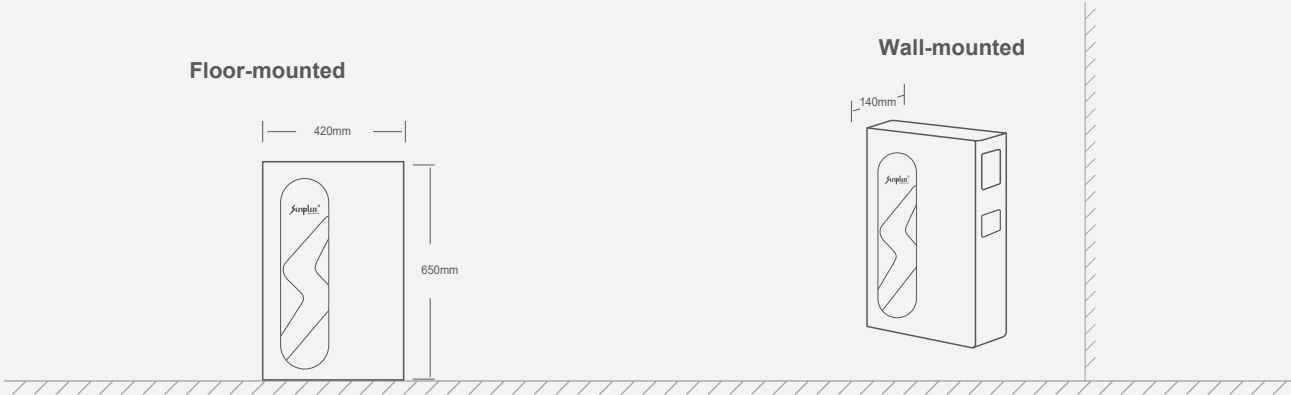
Short Current Protection



Temperature Protection

- Long Design Life
- Multiple Protection
- Modular Design
- Dekra Certification
- Scalable & Flexible
- Remote management & maintenance
- 10 Years Warranty

Two Installation Methods:



Specification

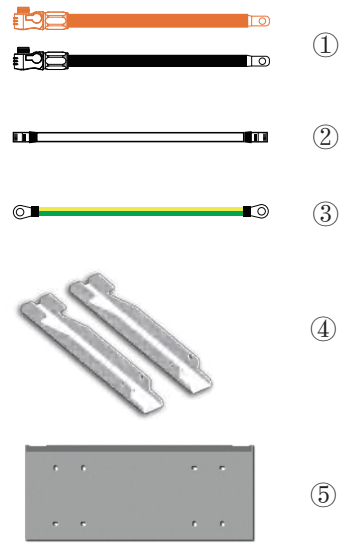
Product Name	Rechargeable Lithium Iron Phosphate Battery
Module Model	SP-LV5320-W 1
Battery Type	LFP 1P16S
Nominal Capacity	104Ah / 5.32kWh
Rated Capacity* ²	5.05kWh
Nominal Voltage	51.2V
Working Voltage	43.2~57.6V
Charging Voltage	57.6
Max. Continuous Charge Current* ³	50A
Max. Continuous Discharge Current* ⁴	100A
Communication	RS485,CAN,WIFI(Optional)
Storage Temperature	0°C ~ 45°C (Recommended)
Storage Humidity	≤ 85% (RH)
Working Temperature	Charging : -10°C ~ 50°C, Discharging : -20°C ~ 50°C
Working Humidity	≤ 95% (RH) No Condensation
Working Altitude	≤ 2000m
Ingress Protection	IP65
Protective Class	I
Weight	51kg
Dimension(W x D x H, mm)	420 x 140 x 650
Design Life	15Years (25°C)
Cycle Life	> 6000 (25°C)
Scalability	Recommended ≤ 3, (Max. 8 in parallel)
Certification	CEI0-21,CE, IEC62619, IEC / EN 61000-6-1/3, UN38.3

*1 Test conditions:cell voltage 2.0~3.65V,25±2℃ , 0.5C charge and 1C discharge.
*2 Test conditions:95% depth of cell discharge,25±2℃ , 0.5C charge and 1C discharge.
*3、*4 Affected by temperature and SOC state.

Matching List



Accessories



① Inverter to Battery Positive & Negative Power Cables
② RJ45 Communication Cable
③ Grounding Cable
④ Square Tube Support
(Fixed On The Back Of The Battery Pack)
⑤ Bracket (Fixed On The Wall)