

SPI-16K-UP

Split-Phase Off-grid Solar Storage Inverter



Efficiency

- 2 High-Efficiency MPPT Input, efficiency up to 99%

User-Friendly

- Time-Sharing Charging/Discharging Settings & Energy-Saving Mode

Reliable

- Max. Input Current per MPPT 36A
- Max. 100A Bypass Current Input (Grid)
- Support 130% unbalanced load
- Max. support for 6 units parallel, Scalable to 96kW for commercial applications

All in one

- Compatible with 48V storage batteries
- 2 power supply modes: PV-only, hybrid charging
- Independent generator interface

Safety

- External Load Anti-Backflow Protection
- WiFi data loggers, RSD, AFCI, and GFCI function

Intelligent

- Dual activation function for lithium batteries
- Generator Port with Smart Load Compatibility

SPI

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture

Product Parameters

Model	SPI-14K-UP		SPI-15K-UP		SPI-16K-UP	
Inverter Output						
Rated Output Power	14,000W		15,000W		16,000W	
Max. Peak Power	2 times rated power, 10s					
Max. Apparent Power	14,000VA		15,000VA		16,000VA	
Rated Output Voltage	120Vac/240Vac (L1+L2+N+PE)					
Rated Output Current	58.3Aac		62.5Aac		66.7Aac	
Load Motor Capacity	9HP					
Rated AC Frequency	50/60Hz					
Waveform	Pure sine wave					
Switch Time	10ms (typical)					
Battery						
Battery Type	Li-ion / Lead-acid / User-defined					
Rated Battery Voltage	48Vdc					
Voltage Range	40Vdc~60Vdc					
Max. Grid/Generator Charging Current	300Aac		300Aac		300Aac	
Max. Charging/Discharging Current	300Aac		300Aac		300Aac	
Solar Input						
Num. Of MPPT Trackers	2					
Max. PV Input Power	12000W + 12000W					
Max. PV Input Current	36Aac + 36Aac					
PV Short-circuit Current	50Aac + 50Aac					
PV Start-up Voltage	90Vdc / 90Vdc					
Max. PV Open-Circuit Voltage	650Vdc / 650Vdc					
MPPT Operating Voltage Range	120Vdc~600Vdc / 120Vdc~600Vdc					
Grid /generator Input						
Rated Input Voltage	120Vac/240Vac (L1+L2+N+PE)					
Input Voltage Range	85Vac~140Vac / 170Vac~280Vac					
Rated Input Frequency	50Hz/60Hz					
Bypass Overload Current (Grid)	100A					
Bypass Overload Current (Generator)	58.3Aac		62.5Aac		66.7A	
Efficiency						
MPPT Tracking Efficiency	>99%	Max. Inverter Efficiency	94.3%	Max. Charging Efficiency	93.4%	
General						
Parallel Capacity	1~6 Units					
Dimensions	514*848.7*190mm		Altitude		2000m	
Weight	47.5kg		Cooling Method		Intelligent Air Cooling	
Protection Level	IP20 Indoor Only		Noise		<60dB	
Temperature	-10~55°C,>45°C Derated		Communication Port		RS485 / CAN / USB / Dry Contact	
Warranty	2 years		External Module		Wi-Fi/4G Stick	
Protection						
Has PV Current Limiting Protection, PV Overvoltage Protection, Night Anti- backcharging Protection, Mains Input/ Overvoltage Protection, Mains Input Undervoltage Protection, Battery Overvoltage Protection, Battery Undervoltage Protection, Battery Overcurrent Protection, AC Output Short- circuit Protection, Heat Sink Overtemperature Protection, Overload Protection, AC Backfeed Protection, Bypass Overcurrent Protection, Bypass Wiring Error Protection, Arc Fault Protection, Leakage Current Protection, Rapid Shutdown Signal Generator (Optional)						