



SPI Series Off-grid three-phase low-voltage inverter

Efficiency

- Advanced MPPT technology with up to 99.9% efficiency
- Up to 22+22A PV input current

Safety

- Comprehensive security from hardware to software
- Multiple safety certifications

All in one

- Up to 260A charging current
- Support Li-ion battery BMS communication

Reliable

- Outputs high quality pure sine wave AC power
- Up to 72kW load power for most household needs

User-Friendly

- Industrial design with a modern aesthetic look
- Easy to install and simple to use

Intelligent

- Exclusive Li-ion battery BMS dual activation
- Time-slot function to save cost

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture

Off-grid Three-Phase Low-voltage Inverter



MODEL	SPI-8K-H3P	SPI-10K-H3P	SPI-12K-H3P	Can Be Set
INVERTER OUTPUT				
Rated Output Power	8,000W	10,000W	12,000W	
Max. Peak Power	16,000W	20,000W	24,000W	
Rated Output Voltage	230/400Vac, three-phase			✓
Capacity of Motor Load	5HP	6HP		
Rated Frequency	50/60Hz			✓
Output Waveform	pure sine wave			
Switching Time	10ms (typical)			
BATTERY				
Battery Types	Li-ion / Lead-Acid / User Defined			✓
Rated Battery Voltage	48Vdc			
Voltage Range	40~60Vdc			✓
Max. PV Charging Current	180A	220A	260A	✓
Max. Utility / Generator Charging Current	100A	120A	120A	✓
Max. Hybrid Charging Current	180A	220A	260A	✓
PV INPUT				
No. of MPPT	2			
Max. Input Power	6,000W/6,000W	7,500W/7,500W	9,000W/9,000W	
Max. Input Current	22A/22A			
Max. Open-circuit Voltage	800Vdc/800Vdc			
MPPT Operating Voltage Range	200~650Vdc/200~650Vdc			
UTILITY / GENERATOR INPUT				
Input Voltage Range	phase voltage 170~280V, line voltage 305~485V			
Input Frequency Range	50/60Hz			
Bypass Overload Current	23.2A	29A	35A	
EFFICIENCY				
MPPT Tracking Efficiency	99.9%			
Max. Battery Inverter Efficiency	≥92%			
European Efficiency	97.2%	97.5%		
GENERAL				
Parallel capacity	1-6 units			
Dimensions	620*445*130mm			
Weight	27kg			
Protection Degree	IP20, indoor only			
Ambient Temp	-10~55°C, >45°C derated			
Noise	<60dB			
Cooling Method	air cooling			
Warranty	24 months			
COMMUNICATION				
Internal Interface	RS485 / CAN / USB / Dry contact			✓
External Module (optional)	Wi-Fi / GPRS			✓
CERTIFICATION				
Safety	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3, FCC15 classB			
RoHS	Yes			