



SPI-16K/18K/20-H3P Off-grid three-phase low-voltage inverter

Efficiency

- Advanced MPPT technology with up to 99% efficiency
- Up to 36A+36A PV input current

Safety

- Comprehensive security from hardware to software
- Multiple safety certifications

All in one

- Up to 360A charging current
- Support Li-ion battery BMS communication

Reliable

- Outputs high quality pure sine wave AC power
- Up to 20kW load power for most household needs
- 2 charging modes are available

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
- Energy saving mode function

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture

Off-grid Three-Phase Low-voltage Inverter



MODEL	SPI-16K-H3P	SPI-18K-H3P	SPI-20K-H3P	Can Be Set
AC OUTPUT				
Rated Output Power	16000W	18000W	20000W	
Max. AC Output Power	17600VA	19800VA	22000VA	
Rated AC Output Current	23.2A	26.0A	29.0A	
Rated Output Voltage	230/400Vac (Three-Phase)			
Rated Output Frequency	50/60Hz			✓
Output Waveform	pure sine wave			
BATTERY INPUT				
Battery Types	Li-ion / Lead-Acid / User Defined			✓
Rated Battery Voltage	48Vdc			
Battery Voltage Range	40Vdc~60Vdc			✓
Max. PV Charging Current	300A	360A	360A	✓
Max. Grid/Generator Charging Current	300A	360A	360A	✓
Max. Charging/Discharging Current	300A	360A	360A	✓
PV INPUT				
No. of MPPT Trackers	2			
Max. PV Input Power	15000W/15000W	15000W/15000W	15000W/15000W	
PV Input Current	36A _{dc} /36A _{dc}			
Min. PV Input Voltage / Start-up Voltage	160Vdc			
Max. PV Input Voltage	1000Vdc			
MPPT Operating Voltage Range	160Vdc~800Vdc			
GRID / GENERATOR INPUT				
Rated Input Voltage	230/400Vac (Three-Phase)			
Rated Input Frequency	50/60Hz			
AC Voltage Range	Phase voltage 170~280V, Line voltage 305~485V			
EFFICIENCY				
MPPT Tracking Efficiency	>99%			
Max. Efficiency	97.6%			
GENERAL DATA				
Parallel Capacity	1~6 units			
Dimensions (W × H × D)	593.4x803.4x215mm			
Weight	50kg			
Protection Degree	IP20, indoor only			
Ambient Temp	-10~55°C, >45°C derated			
Noise	<60dB			
Cooling Method	air cooling			
Warranty	18 months			
COMMUNICATION				
Internal Interface	RS485 / CAN / USB / Dry contact			✓
External Module (optional)	Wi-Fi / GPRS			✓
CERTIFICATION				
CERTIFICATION	IEC62109-1, IEC62109-2			
EMC	EN61000-6-1, EN61000-6-3			