US- Residential Hybrid Inverter

SPI4865M150-300P



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6500W / Single-Phase / Parallel

Product Features

- CT Anti-Backflow, Zero Feed-in Protection
- 150% Surge Peak Output for 5 Seconds, Withstands Continuous Impact Loads
- Peak Shaving, Smart Tariff Management
- 9kW Dual MPPT, 22A / 4500W per Channel
- 6-Unit Parallel, Up to 39kW per Split-Phase / Three-Phase Group
- 10ms UPS Transfer, Uninterrupted Power for Critical Loads
- Battery 135A Continuous Discharge, 120A Max Charge
- Dry Contact Diesel Generator Control
- Battery-less Operation, Solar + Grid Direct Supply
- Dual PV / Grid Source Battery Activation



6500W Residential Hybrid Inverter Specifications

DC Input (PV)	
Max DC Input Power	4500W+4500W
Max DC Input Voltage	300V
Start Voltage	120V
PV Input Voltage Range	90~300V
MPPT Voltage Range	90~280V
MPPT Channels	2
Max MPPT Input Current	22A
Max PV Charging Current	150A
AC Input	
AC Input Range	85~140Vac
Frequency Range	47~55Hz/57~65Hz
Max AC Input Current	60Aac
Max AC Charge Current	120Adc
AC Output	
Rated AC Output Power	6500W
Max AC Output Power	6500VA
Peak Power / Duration	9750VA/5s
Rated Output Voltage	120Vac
Output Frequency	50/60Hz
Power Factor Type	1
AC Connection	L+N+PE

Efficiency	
Max Efficiency (Battery to Load)	>92%
Battery Parameters	
Rated Battery Voltage	48Vdc
Min Start Voltage	44V
Battery Voltage Range	40~60Vdc
Battery Type	Lead-Acid / Lithium
Max Charge / Discharge Current	120A/135A
Charge Voltage Range	40~60Vdc
Protection	
Grid Overload Protection	Circuit Breaker
Grid Breaker Rating	63A
AC Reverse Feed Protection	Yes
Battery Short Circuit Protection	Fuse
AC Output Short Circuit Protection	Yes
Wiring Protection	Yes
Transfer Time	10ms (Typical)

General Data	
Dimensions (W × D × H)	540×380×120mm
Weight	18kg
Operating Temperature	-10° C to 55° C (Derating above 45° C)
Storage Temperature	-25° C~60° C
Humidity Range	5%~95%
Cooling Method	Forced Air Cooling (Variable Speed)
Protection Class	IP21
Noise	≤ 60dB
Altitude	4000m (2000m ≤ No Derating)
Safety / EMC Certification	UL1741 / CSA C22.2#107.1 | FCC Part15 Class B
Features	
Parallel Units	1 to 6 Units
Phases	Single-Phase
Communication Ports	USB/RS485/WiFi
Dry Contact Control	Yes
Battery-less Operation	Yes
Remote Diagnostics / OTA	Yes
CT Anti-Backflow	Yes