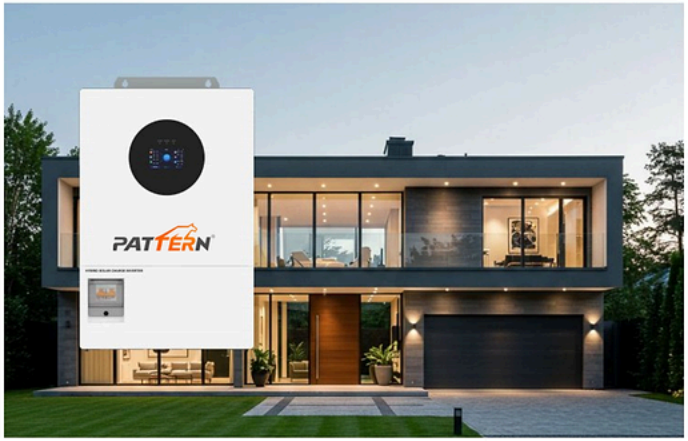
US-Residential Hybrid Inverter

GES48160M300-500XP



GES48160M300-500XP

16000W / Split-Phase / Parallel

Product Features

- CT Anti-Backflow + AC Coupling, Zero Feed-in Protection
- 150% Surge Peak Output for 5 Seconds, Withstands Continuous Impact Loads
- Peak Shaving, Smart Tariff Management
- 24kW Dual MPPT, 36A / 12000W per Channel
- 6-Unit Parallel Expansion, Up to 96kW
- 10ms UPS Transfer, Uninterrupted Power for Critical Loads
- Battery 340A Continuous Discharge, 300A Max Charge
- Dry Contact Diesel Generator Control
- Battery-less Operation, Solar + Grid Direct Supply
- Dual PV / Grid Source Battery Activation
- Touch Color Screen



16000W Residential Hybrid Inverter Specifications

DC Input (PV)	
Max DC Input Power	12000W+12000W
Max DC Input Voltage	500V
Start Voltage	120V
PV Input Voltage Range	90~450V
MPPT Voltage Range	90~450V
MPPT Channels	2
Max MPPT Input Current	36A+36A
Max PV Charging Current	300A
AC Input	
Per-Phase AC Input Range	85~140Vac
Frequency Range	47~55Hz / 57~65Hz
Max Per-Phase AC Input Current	90Aac
Max AC Charge Current	200Adc
AC Output	
Rated Output Power (Per Phase)	16000W
Rated Output (Same Phase)	9600W
Peak Power (Per Phase)	24000VA
Rated Output Voltage	120/240Vac
Output Frequency	50/60Hz
Power Factor	1
AC Connection Type	L1+L2+N+PE

Efficiency	
Max Efficiency (Battery to Load)	>93.5%
Battery Parameters	
Rated Battery Voltage	51.2V
Min Start Voltage	44V
Battery Voltage Range	40~60Vdc
Battery Type	Lead-Acid / Lithium
Max Charge / Discharge Current	300A/340A
Charge Voltage Range	40~60Vdc
Protection	
Grid Overload Protection	Circuit Breaker
Grid Breaker Rating	100A
AC Reverse Feed Protection	Yes
Charge Short Circuit Protection	Fuse
AC Output Short Circuit Protection	Yes
Wiring Protection	Yes
Transfer Time	10ms (Typical)

General Data	
Dimensions (W × D × H)	720×482×149mm
Weight	37.5kg
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	Split-Phase
Communication Ports	USB/RS485/WiFi/CAN
AC Coupling	Yes
Dry Contact Control	Yes
Battery-less Operation	Yes
Remote Diagnostics / OTA	Yes
CT Anti-Backflow	Yes