

PHS SERIES ON/OFF GRID HYBRID SOLAR INVERTER

5.5kW/6.2kW 220VAC/230VAC/240VAC

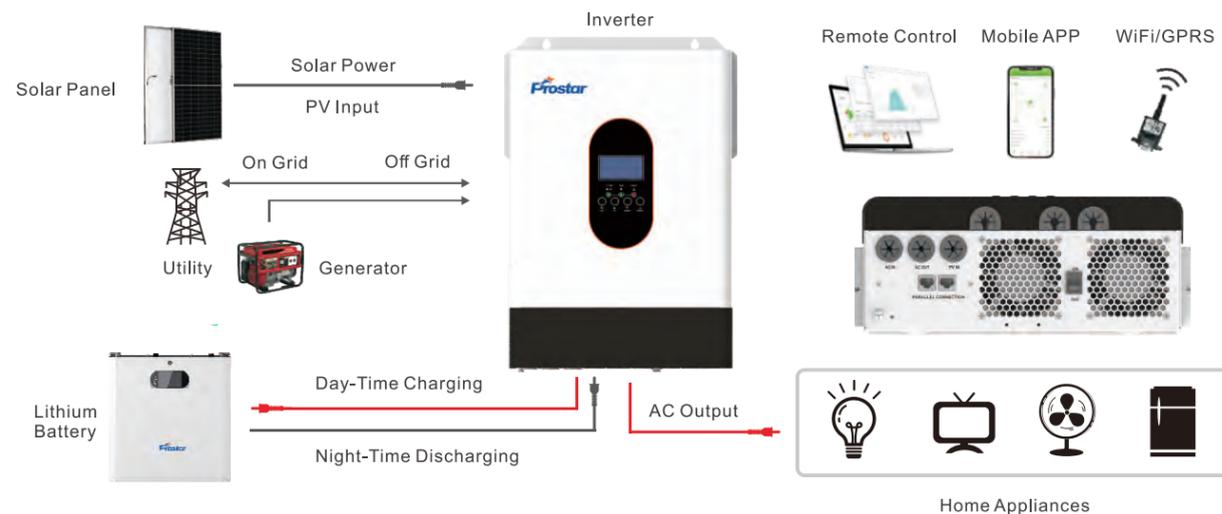


Performance Characteristics

1. Output power factor 1.0
2. Wide PV input voltage range: Up to 500Vdc
3. Built-in 100A MPPT solar controller
4. Reserved communication port for BMS integration
5. Optional WiFi remote monitoring
6. Customizable charging settings
7. Detachable dust cover for rugged environments
8. EQ function for battery optimization
9. Multiple output priority options
10. Backflow prevention with external CT sensor
11. Programmable supply priority (PV, Battery, Grid)
12. Programmable operation modes (Grid-Tie, Off-Grid, Backup)
13. Parallel operation supporting up to 12 units for both single-phase and three-phase systems

PHS series on/off grid hybrid solar inverter is engineered to seamlessly switch between on-grid and off-grid modes, ensuring uninterrupted power supply. In on-grid mode, excess energy can be sold back to the grid, while in off-grid mode, it ensures self-sufficiency during power outages or in remote locations. It can work with lithium battery storage systems, enabling the capture and utilization of excess energy. Stay connected to your energy system from anywhere using mobile app or web portal via WiFi module.

Application Diagram



Technical Specifications

MODEL	PHS5.5K-48PL	PHS6.2K-48PL
Phase	1-Phase In /1-Phase Out	1-Phase In /1-Phase Out
Maximum PV Input Power	5500W	6200W
Rated Output Power	5500VA/5500W	6200VA/6200W
Lithium Battery Activation	Yes	Yes
Lithium Battery Communication	Yes	Yes
Dimension, DxWxH (mm)	448x315x122	448x315x122
Net Weight (Kg)	11	12
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage / Initial Feeding Voltage	150VDC/120VDC	
MPPT Voltage Range	60VDC~500VDC	60VDC~500VDC
Number of MPPT Trackers / Maximum Input Current	1/18A	1/27A
GRID OUTPUT (AC)		
Nominal Output Voltage	220 / 230 / 240VAC	
Output Voltage Range	170-280VAC or 90-280VAC	
Nominal Output Current	22A	27A
Power Factor	0.6~1 (Inductive or Capacitive)	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	94%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	100VAC / 90VAC	
Acceptable Input Voltage Range	170-280VAC or 90-280VAC	
Maximum AC Input Current	40A	
PV INPUT (DC)		
Maximum DC Voltage	500VDC	
MPPT Voltage Range	60VDC-500VDC	60VDC-500VDC
Number of MPPT Trackers / Maximum Input Current	1/18A	1/27A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure Sine Wave	
Efficiency (DC to AC)	94%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage / Initial Feeding Voltage	150VDC/120VDC	
MPPT Voltage Range	60VDC-500VDC	60VDC-500VDC
Number of MPPT Trackers / Maximum Input Current	1/18A	1/27A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	170-280VAC or 90-280VAC	
Nominal Output Current	22A	27A
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	100VAC/90VAC	
Acceptable Input Voltage Range	170-280VAC or 90-280VAC	
Maximum AC Input Current	40A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	48VDC	
Efficiency (DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	48VDC
Maximum Solar Charging Current	100A	120A
Maximum AC Charging Current	80A	80A
Maximum Charging Current	100A	120A
INTERFACE		
Parallel Function	1-Phase Parallelx12/3-Phase Parallelx12	
Communication Port	RS232/RS485/External CT Port	
ENVIRONMENT		
Humidity	5%~95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C~55°C	