


# PIM SERIES OFF GRID HYBRID SOLAR INVERTER

5.5kW/6.2kW Parallel 220VAC/230VAC

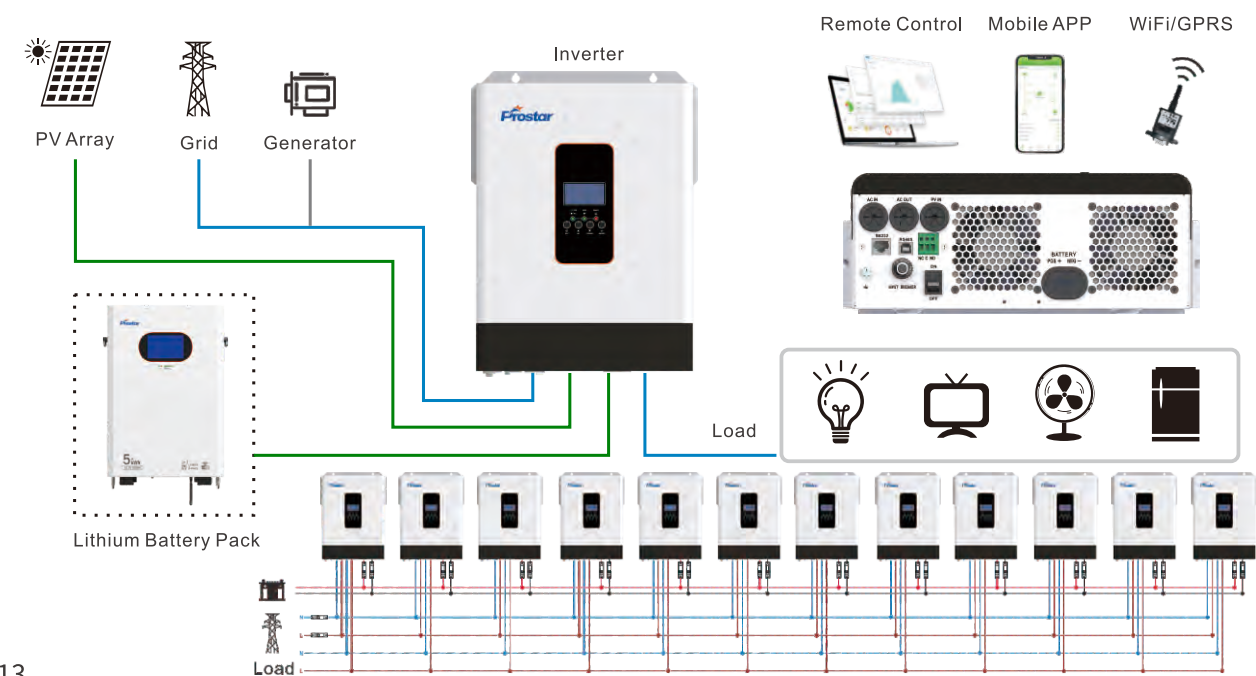


### Performance Characteristics

1. Pure sine wave
2. Power factor 1.0
3. Wide PV input voltage range: Up to 500Vdc
4. Built-in 100A MPPT solar controller
5. Capable to work without battery
6. Optional WiFi monitoring
7. LiFePO4 battery compatibility via RS485
8. Support multiple output priority: Utility Priority, Solar Priority, Solar > Battery > Utility, Solar > Utility > Battery
9. Battery equalization function to optimize battery performance and extend lifecycle
10. Parallel operation supporting up to 12 units for both single-phase and three-phase systems

The PIM series off-grid hybrid solar inverter is a multifunctional device that effectively integrates the functions of an inverter, mppt solar charger, and battery charger. It is engineered to deliver uninterrupted power in a compact and portable design. The inverter boasts a user-friendly LCD display, making it easy for users to configure settings. These settings include battery charging current, AC/Solar charger priority, and input voltage acceptance, all of which can be customized to suit various applications.

## Application Diagram



## Technical Specifications

MODEL	PIM5.5K-48PL	PIM6.2K-48PL
Capacity	5.5KVA/5.5KW	6.2KVA/6.2KW
Dimensions,DxWxH(mm)	448x295x120	450x300x130
Package Dimensions,DxWxH(mm)	560x375x190	540x390x210
Net Weight(Kg)	10	12
Parallel Capability	YES, 12 Units	
Lithium Battery Activation	No	YES(By PV or Utility)
Lithium Battery Communication	YES(RS485)	
INPUT		
Nominal Voltage	220/230VAC	
Acceptable Voltage Range	170-280VAC(For Personal Computer);90-280VAC(For Home Appliances)	
Frequency	50/60 Hz(Auto Sensing)	
OUTPUT		
Nominal Voltage	220/230VAC±5%	
Surge Power	11000VA	12400VA
Frequency	50/60Hz	
Waveform	Pure Sine Wave	
Transfer Time	10ms(For Personal Computer);20ms(For Home Appliances)	
Peak Efficiency(PV to INV)	96%	94%
Peak Efficiency(Battery to INV)	93%	92%
Over load Protection	5s@>=150% Load; 10s@110%~150% Load	
Crest Factor	3:1	
Admissible Power Factor	0.6-1 (Inductive or Capacitive)	
BATTERY		
Battery Voltage	48VDC	
Floating Charge Voltage	54VDC	
Over Charge Protection	63VDC	
Charging Method	CC/CV	
SOLAR CHARGER & AC CHARGER		
Solar Charger Type	MPPT	
Max.PV Array Power	5500W	6500W
Max.PV Array Open Circuit Voltage	500VDC	
PV Array MPPT Voltage Range	60VDC-450VDC	
Max.Solar Input Current	18A	27A
Max.Solar Charge Current	100A	120A
Max.AC Charge Current	60A	80A
Max.Charge Current	100A	120A
COMMUNICATION		
Communication Interface	RS232/RS485/Dry Contact	RS232/RS485/Dry Contact
ENVIRONMENT		
Operating Temperature Range	-10°C to 50°C	
Storage Temperature	-15°C to 50°C	
Humidity	5% to 95% Relative Humidity(Non-condensing)	