

PIE SERIES OFF GRID HYBRID SOLAR INVERTER

3.5kW-6.2kW

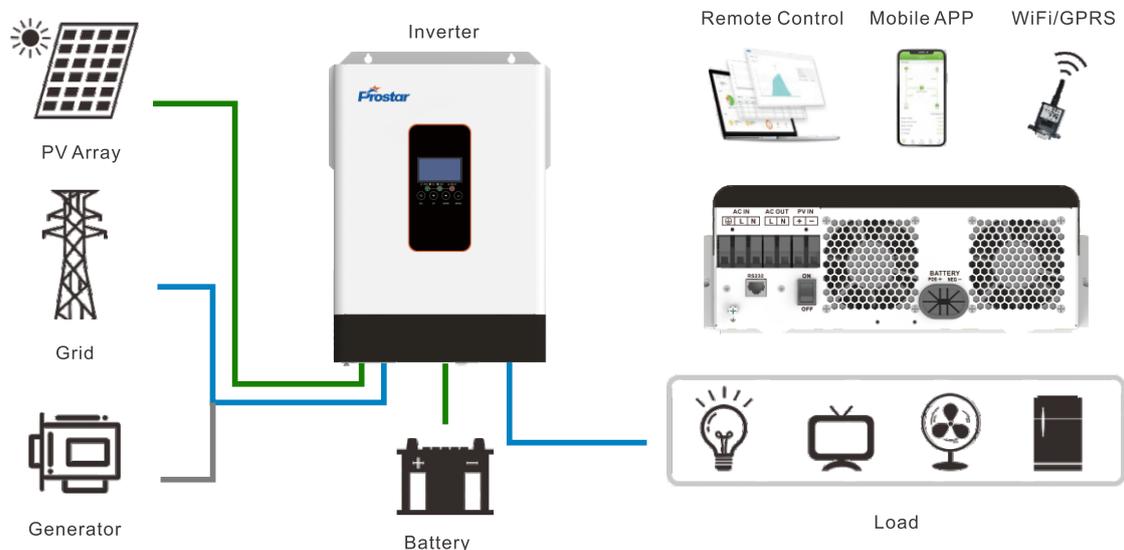


Performance Characteristics

1. Pure sine wave
2. Power factor 1.0
3. PV input voltage 60Vdc-500Vdc
4. Built-in 100A/120A MPPT solar controller
5. Lithium Battery Activation
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. Equalization function to optimize battery performance and extend lifecycle
10. Detachable dust cover for harsh environment

The PIE series of off-grid hybrid solar inverter offers a pure sine wave output, boasting utility power factor and wide PV input voltage support (60Vdc - 500Vdc). With built-in 100A/120A MPPT solar controller, this solar inverter is highly efficient and versatile. It can activate lithium batteries, support WiFi monitoring, and communicate with LiFePO4 batteries via RS485. Additionally, it features multiple output priority working modes and includes an equalization function for optimizing battery performance. The PIE series is exceptionally ideal for various applications and can handle challenging environmental conditions with ease.

Application Diagram





Technical Specifications

| MODEL | PIE3.5K-24 | PIE3.5K-24L | PIE5.5K-48L | PIE6.2K-48L |
|---------------------------------------|--|--------------|--------------|--------------|
| CAPACITY | 3.5KVA/3.5KW | 3.5KVA/3.5KW | 5.5KVA/5.5KW | 6.2KVA/6.2KW |
| Dimensions,DxWxH(mm) | 438x295x105 | 358x295x100 | 438x295x105 | |
| Package Dimensions,DxWxH(mm) | 560x375x185 | 465x380x175 | 560x375x185 | |
| Net Weight(Kg) | 7 | 6 | 8.2 | 8.7 |
| Parallel Capability | NO | NO | NO | NO |
| INPUT | | | | |
| Nominal Voltage | 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 | 7000VA | 7000VA | 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% | | | |
| Peak Efficiency(Battery to INV) | 93% | | | |
| Overload Protection | 5s@>=150% load; 10s@110%~150% load | | | |
| Crest Factor | 3:1 | | | |
| Admissible Power FACTOR | 0.6-1 (inductive or capacitive) | | | |
| BATTERY | | | | |
| Battery Voltage | 24VDC | 24VDC | 48VDC | 48VDC |
| Floating Charge Voltage | 27VDC | 27VDC | 54VDC | 54VDC |
| OverCharge Protection | 33VDC | 33VDC | 63VDC | 63VDC |
| Charging Method | CC/CV | | | |
| Lithium Battery Activation | No | Yes | | |
| Lithium Battery Communication | No | Yes(RS485) | | |
| Solar Charger & AC Charger | | | | |
| Solar Charger TYPE | MPPT | | | |
| Max.PV Array Power | 4000W | 4000W | 5500W | 6500W |
| Max.PV Array Open Circuit Voltage | 500VDC | | | |
| PV Array MPPT Voltage Range | 120VDC-450VDC | 60VDC-500VDC | | |
| Max.Solar Input Current | 15A | 15A | 18A | 27A |
| Max.Solar Charge Current | 100A | 100A | 100 A | 120 A |
| Max.AC Charge Current | 60A | 60A | 80A | 80A |
| Max.Charge Current | 100A | 100A | 100 A | 120 A |
| PHYSICAL | | | | |
| Communication Interface | RS232 | RS232+RS485 | | |
| ENVIRONMENT | | | | |
| Operating Temperature Range | (-10°C to 50°C) | | | |
| Storage temperature | (-15°Cto 50°C) | | | |
| Humidity | 5% to 95% Relative Humidity(Non-condensing) | | | |