

# PEI 3P SERIES THREE PHASE ENERGY STORAGE INVERTER

6KW-15KW 380VAC/400VAC/415VAC

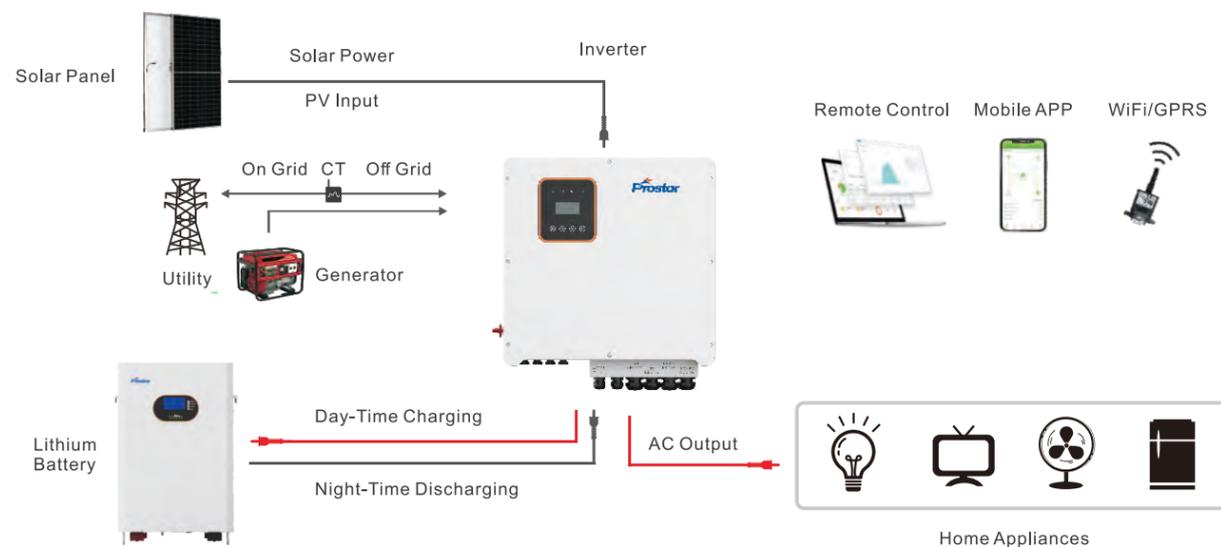


### Performance Characteristics

1. BMS Compatibility: Supports remote upgrades for Battery Management Systems (non-standard)
2. Load Flexibility: Compatible with single-phase and three-phase loads, accommodating 100% unbalanced loads
3. Efficient Energy Management: Enables full power discharge and automatic battery charge/discharge management
4. Multi-Source Integration: Supports simultaneous connection of PV, diesel generators, batteries, and loads, with strong adaptability and black start capability
5. Versatile Operation Modes: Offers flexible configuration of various working modes for optimized energy use
6. Cost-Effective Operation: Supports multiple operating modes for enhanced economic efficiency
7. UPS Functionality: Acts as an uninterruptible power supply (UPS) for critical loads during power outages

PEI 3P Series Three Phase Energy Storage Inverter, with power ratings ranging from 6KW to 15KW and an output of 400VAC, is designed to enhance energy independence for homeowners. It supports both single-phase and three-phase loads, with the capability to handle 100% unbalanced loads. The inverter achieves a maximum efficiency of 97.9%, making it a reliable and efficient solution for hybrid energy systems.

## Application Diagram



## Technical Specifications

Model	PEI6K-3P	PEI8K-3P	PEI10K-3P	PEI12K-3P	PEI15K-3P
<b>PV String Input</b>					
Max.PV Input Power (kW)	9	12	15	18	22.5
Max. PV Voltage (V)	1,000				
MPPT Voltage Range (V)	180~850				
Full Power MPPT Voltage Range (V)	250~850	330~850	430~850	510~850	425~850
Start-up Voltage (V)	125				
Max. Input Current Per MPPT (A)	18/18			20/20	
Max. Short-Circuit Current (A)	25/25			30/30	
No. Of MPPT Trackers	2				
MPPT number/Max. Input Strings Number	1/1			2/2	
Rated Input Voltage	600				
<b>AC Output</b>					
Nominal Output Power To Grid (kVA)	6	8	10	12	15
Max. Apparent Power To Grid (kVA)	6.6	8.8	11	13.2	16.5
Max. Apparent Power From Grid (kVA)	13.2	17.6	22	26.4	33
Max. Apparent Current From Grid (A)	19.1	25.5	31.8	38.1	47.6
Nominal Output Current To Grid (A)	8.7	11.5	14.4	17.3	21.7
Max.output Current To Grid (A)	9.5	12.7	15.9	19.1	23.8
Nominal Grid Voltage (V)	3W+N+PE, 220/380V; 230/400V; 240/415V				
Nominal Grid Frequency (Hz)	50/60				
THDi	< 3%				
<b>Battery</b>					
Max.Charging /Discharging Power (kW)	6.6	8.8	11	13.2	16.5
Battery Voltage Range (V)	125~600				
Battery Working Voltage Range (V)	150~550				
Min.Full Power Voltage@EPS	160	210	260	310	385
Max.Charging/Discharging Current (A)	50				
Rated.Charging /Discharging Current (A)	40				
Battery Type	Lithium And Lead Acid Battery				
<b>EPS Output</b>					
Nominal Output Power (kVA)	8	8	10	12	15
Max. Apparent Power (kVA)	8.8	8.8	11	13.2	16.5
Nominal Output Current (A)	8.7	11.5	14.4	17.3	21.7
Max.Output Current (A)	9.5	12.7	15.9	19.1	23.8
Nominal Output Voltage (V)	380/400/415 ,3W+N+PE				
Nominal Output Frequency (Hz)	50/60				
THDu	< 2%				
Max.Efficiency	97.90%	97.90%	98.00%	98.00%	98.10%
Europe Efficiency	97.30%	97.40%	97.50%	97.50%	97.50%
MPPT Efficiency	99.90%				
Max.Battery Charge/Discharge Efficiency	97.00%				
<b>General Data</b>					
Ingress Protection	IP65				
Operating Temperature Range (°C)	-35~60				
Relative Humidity	0~100%				
Operating Altitude (m)	2000m(Derating Above 2000m)				
Dimensions (WxHxD)	530x560x220mm				
Weight	32kg				
Cooling	Natural Convection				
Noise Emission (dB)	≤35				
Installation	Wall Mounted				
Supported Protections	Island Protection / PV reverse polarity protection / Battery reverse polarity protection / Insulation monitoring /Residual current monitoring / AC over current protection / AC over power protection / Back-up Output Short Protection / Short circuit protection / Island Protection / Battery reverse Polarity / Insulation Resistor Detection				
<b>Interface</b>					
HMI	LCD; APP				
BMS	CAN				
EMS/Meter	RS485/RS485				
Supported Communication Interface	WiFi				