

PEI SERIES SINGLE PHASE ENERGY STORAGE INVERTER

3KW-10KW 220VAC/230VAC/240VAC

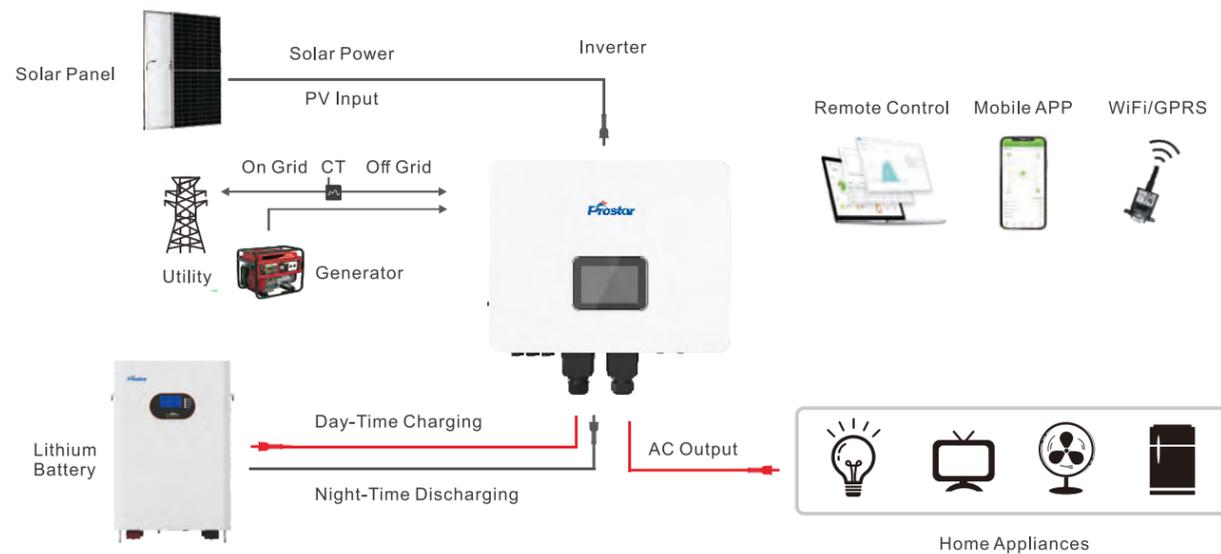


Performance Characteristics

- 1.Enhanced Efficiency: Incorporates soft switching technology, increasing overall efficiency by 0.5% and achieving a maximum efficiency of ≥98%
- 2.Compact Design: Reduces installation space and labor costs by 50%, ideal for space-constrained environments
- 3.High Compatibility: Supports the latest 210mm high-power PV panels with an Isc of 18.5A
- 4.Advanced Connectivity: Allows mobile configuration and maintenance via Bluetooth and WiFi
- 5.Scalable Power: Supports multi-unit parallel operation for flexible system expansion
- 6.Battery Versatility: Compatible with various battery types, including lead-acid and lithium-ion
- 7.Extended Operation: Features ultra-low starting voltage for prolonged power generation

PEI Series Single Phase Energy Storage Inverter, ranging from 3KW to 10KW, features a compact and lightweight design, reducing installation labor costs by 50%. With a full-load efficiency improvement of 0.5%, it supports high-power 210mm PV panels with a current rating of 18.5A and delivers up to 10kW of power output. The series provides flexibility in system design and scalability, enabling users to expand capacity based on energy storage needs. It also supports parallel operation of up to six units.

Application Diagram



Technical Specifications

Model	PEI3K	PEI3.6K	PEI4K	PEI5K	PEI6K	PEI8K	PEI10K
PV String Input							
Max. Input Power (kW)	4.5	5.4	6	7.5	9	12	15
Start-up Voltage (V)	100						
Max. PV Input Voltage (V)	550						
MPPT Range/nominal (V)	80~500/360						
Max.input Current Of Single MPPT (A)	16/16			16/32			
Max. Short-circuit Current (A)	18.5/18.5			18.5/37			
AC output							
Rated Power (kW)	3	3.68	4	5	6	8	10
Max.AC Current Output To Grid (A)	14.3	16	19.1	21.7	28.7	38.3	43.5
Nominal Voltage/range (V)	220/230/240 /176~270						
Frequency (Hz)	50 /60						
Power Factor	1(0.8 Leading-0.8 Lagging)						
THDi	< 3%						
AC Grid Type	L+N+PE						
Battery							
Battery Voltage Range (V)	40~58						
Max. Charging Voltage (V)	58						
Max. Charge/Discharge Current (A)	60/60	72/72	80/80	100/100	120/120	160/160	200/200
Battery Type	Lithium /Lead-acid						
Communication Interface	CAN/RS485						
Max.Battery Output Power/ Duration(kW/min)	/						8/20
EPS Output							
Rated Power (kW)	3	3.68	4	5	6	8	10
Rated Voltage (V)	220/230/240						
Max.AC Current Output To Grid (A)	14.3	16	19.1	21.7	28.7	38.3	43.5
Rated Frequency (Hz)	50 / 60						
Automatic Switchover Time (ms)	< 10						
THDU	< 2%						
Overload Capacity	110%, 60S/ 120%, 30S/ 150%, 10S						
General Data							
Battery Charge/Discharge Efficiency	96%						
PV Max. Efficiency	98%						
Europe Efficiency	97%						
MPPT Efficiency	99.90%						
Ingress Protection	IP65						
Noise Emission (dB)	< 35						
Operation Temperature (°C)	-25 ~ 60						
Cooling	Natural						
Relative Humidity	0 ~ 95% (Non-Condensing)						
Operating Altitude (m)	2,000 (> 2,000 Derating)						
Dimensions WxDxH (mm)	With Generator:454.5x220x499.7 / Without Generator:454.5x220x467					With Generator:484.5x220x499.7 Without Generator:484.5x220x467	
Net Weight (kg)	19 (20 With Generator Input)					22(23 Standard Model)	
Topology	Non-Isolated						
Standby Loss(W)	< 15						
Display	Optional (Colorful Touch Screen /No Screen)						
Interface:RS485/Wifi/4G/CAN/DRM	Yes/Opt/Opt/Yes/Yes						