

PSI-A1P Series

Inverter

PSI-A1P3600-HY | PSI-A1P6000-HY

Battery

PSI-A-BT3.8S



Single-phase system

For **residential** applications



Inverter with power rating

3,68 kW or 6 kW



3,8 kWh battery module

Possible configurations from **1 to 4 modules in series**



10-year warranty ⁽¹⁾

For systems consisting of inverter plus battery

Hybrid Inverters

UPS functionality with intelligent off-grid management.

Flexible wall-mounted or floor-mounted installation.

Anti-shading function for optimal performance.

Hybrid Battery

Safe LFP cells for maximum reliability.

Capacity optimization through module balancing, with fast charge/discharge at 1 C.

System Specifications

PSI-A1P3600-HY | PSI-A-BT3.8S

PSI-A1P6000-HY | PSI-A-BT3.8S

Rated output power	3,68 kW	6 kW
Capacity range	3,8 ~ 15,2 kWh (95% DoD)	
Battery type	LFP (LiFePO4)	
Warranty	10 years ⁽¹⁾	

1. The 10-year warranty is valid only upon product registration on the portal and activation of the monitoring service.

Inverter Specifications

PSI-A1P3600-HY

PSI-A1P6000-HY

Max. PV input power	7,36 kW	10 kW
Max. PV input current	15 A / 15 A	
Max. PV input voltage	580 V	
Number of MPPTs	2	
Number of DC inputs per MPPT	1	
MPPT voltage range	100 ~ 550 V	
Max. PV short-circuit current	18,75 A	22,5 A
Max. charge / discharge current	60 A	
Max. charge / discharge power	3,68 kW	6 kW
Nominal frequency	50 / 60 Hz	
Nominal voltage	L / N / PE, 230 V	
Type	Hybrid, single-phase	
Rated output current (Grid port)	16 A	26,0 A
Rated output current (Backup port)	16 A	26,0 A
Max. AC input power ⁽²⁾	7,36 kW	11,5 kW
Backup	UPS	
Communication	Ethernet / Wi-Fi	
Relative humidity	0 to 90% non-condensing	
Dimensions (W x D x H)	610 x 212 x 366 mm	
Weight	19,5 kg	20,5 kg
IP protection rating	IP65	
Noise emission	≤ 35 dB	

2. In specific applications.

Battery Parameters

PSI-A-BT3.8S

Module capacity	3,8 kWh
Usable capacity	3,648 kWh
Depth of discharge (DoD)	95% ⁽³⁾
Nominal voltage	96 V
Max. charge / discharge current	40 A ⁽⁴⁾
Operating temperature range	From -10 °C to 50 °C ⁽⁵⁾
Cycle life	10000 ⁽⁶⁾
Possible configurations	1 ~ 4 modules in series ⁽⁷⁾
Dimensions (W x D x H)	610 x 212,5 x 435 mm
IP protection rating	IP21
Weight	39,2 kg
Noise emission	≤ 35 dB

3. Test conditions: max. 0,5C charge/discharge at 25 ±2 °C.

4. 50 A discharge current sustainable for 30 minutes in off-grid operation.

5. Max. charge/discharge current may vary depending on temperature conditions and SoC (state of charge).

6. Under specific test conditions.

7. Please refer to the PSI-A-BT3.8S battery datasheet.

Certifications

For a complete list of certifications, please refer to www.peimar.com

