

PSI-X3S6000-HY | PSI-X3S8000-HY PSI-X3S10000-HY | PSI-X3S15000-HY

PSI-X3S SERIES | THREE PHASE HYBRID INVERTER



- ✓ **EQUIPPED WITH A DISPLAY**
Which offers a rapid commissioning and direct control
- ✓ **PEIMAR X PORTAL**
For remote monitoring, data reading and programming
- ✓ **2 MPPT**
- ✓ **IP65**

High Efficiency

200 % PV oversized and up to 110 % AC overload output
Higher efficiency on charging and discharging, up to 97,5 %
Built-in shadow tracking function

Safe and Reliable

Integrated SPD
16 A DC single string input current, support high power solar panel
Up to 150% PV input
Store the surplus energy from PV to battery
Low start output voltage makes inverter longer working time
Less energy loss on battery to inverter

Smart

150 % EPS overload output for 10s
Switchover time < 10 ms
Quick configuration with U-disk
Lithium-ion & Lead-acid battery compatible
CT compatible, loads respond within 0,3s
Intelligent loads management (e.g., Heat pump)
On & Off-grid parallel function, up to 150 kW
5 work modes, 2 charging periods available
VPP ready, ancillary service in power market
Three-phase unbalanced output Maximum 5 kW output power on single phase at most
Super-backup ready, EPS operation without batteries

DC Input	PSI-X3S6000-HY	PSI-X3S8000-HY	PSI-X3S10000-HY	PSI-X3S15000-HY
Max. PV array power	12000 W	16000 W	20000 W	30000 W
Max. PV input voltage	1000 V			
Start voltage	200 V			
Nominal input voltage	640 V			
MPP voltage range	180 - 950 V			
No. of MPP trackers / Strings per MPP tracker	1 / 1	2 / 1	2 / 1	2 / 1
Max. input current	16 / 16 A	28 / 16 A	28 / 16 A	28 / 16 A
Max. short circuit current	20 / 20 A	35 / 20 A	35 / 20 A	35 / 20 A

Battery Data

Battery type	Lithium-ion battery
Battery voltage range	180 - 800 V
Max. continuous charge / discharge current	30 / 30 A

Output AC

Nominal AC output power	6000 W	8000 W	10000 W	15000 W
Max. AC output apparent power	6600 VA	8800 VA	11000 VA	15000 VA
Max. AC output current	9.7 A	12.9 A	16.1 A	24.1 A
Max. AC input apparent power	1200 VA	1600 VA	20000 VA	20000 VA
Max. AC input current	19.3 A	25.8 A	32.0 A	32.0 A
Nominal AC voltage	415 / 240 V; 400 / 230 V; 380 / 220 V			
Nominal grid frequency	50 / 60 Hz			
Displacement power factor (cos φ)	0.8 leading - 0.8 lagging			
THDi, rated power	< 3%			

Output AC (Back-Up mode)

Nominal output power	6000 W	8000 W	10000 W	15000 W
Peak apparent power	12000 VA, 10s	18000 VA, 10s	18000 VA, 10s	22500 VA, 10s
Max. continuous current	8.7 A	11.6 A	14.5 A	21.8 A
Nominal voltage	400 / 230 V			
Nominal frequency	50 / 60 Hz			
Switch time	< 10 ms			
Parallel operation	Yes			

System Data

Max. efficiency	98.0 %			
Euro. efficiency	97.7 %			
Battery charge / discharge efficiency ⁽¹⁾	98.5 % / 97.5 %			
Degree of protection	IP65			
Operating temperature range	- 35 °C ~ + 60 °C (derating above + 45 °C)			
Altitude	< 3000 m			
Relative humidity	0 - 100 %			
Typical noise emission	< 35 dB		< 45 dB	
Storage temperature	- 40 °C ~ + 70 °C			
Dimensions (W x H x D)	503 x 503 x 199 mm			
Net weight	30 kg			
Cooling concept	Nature cooling		Smart cooling	
Communication interfaces	CT / Meter (optional), External control RS485, Pocket Wi-Fi (optional: Pocket Lan / 4G), DRM, USB Upgrade, NTC (optional)			

Power Consumption

Internal consumption (night)	< 40 W for standby, < 5 W for idle
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Certifications

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

¹ PV to BAT Max. efficiency 98.5 %, BAT to AC Max. efficiency 97.5 %