

PSI-X3P20000-HYM | PSI-X3P30000-HYM

PSI-X3P HYM 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 / 3 MPPT**
- IP66**

DC Input	PSI-X3P20000-HYM	PSI-X3P30000-HYM
Max. PV input power	40000 W	60000 W
Max. PV input voltage		1000 V
MPPT voltage range		160 - 950 V
Nominal input voltage		600 V
Startup voltage		200 V
Max. input current per MPPT	36 / 36 A	36 / 36 / 36 A
Max. short circuit current per MPPT	45 / 45 A	45 / 45 / 45 A
Number of Strings per MPPT	2 / 2	2 / 2 / 2
Number of MPPTs	2	3
DC Switch (DC-PV2)		Integrated

Battery Parameters

Storage devices (supply not included)	PSI-X-3.6HS batteries
Possible battery configurations	From 4 to 78 PSI-X-3.6HS module using PSI-X-BMS-HS BMS, PSI-X-PBOX-HS parallel box, PSI-X-SBOX-HS series box
Battery connection terminals	2
Battery type	Lithium battery (LiFePO4)
Input voltage range	180 - 800 V
Communication Interfaces	BMS / RS485
Max current charge / discharge	60 (30 x 2) A

Accessories

Measuring device (not included)	PSI-X-3PMETER-HY for current up to 80 A PSI-X-3PMETER-HY-TA for current up to 200 A
Functions	Measurement of electrical parameters for management of external loads and charging/discharging of the storage system

PSI-X₃P HYM

Input AC	PSI-X ₃ P20000-HYM	PSI-X ₃ P30000-HYM
Nominal power	20000 W	30000 W
Nominal current	29.0 A	43.5 A
Nominal grid voltage	220/380 V, 230/400 V	
Nominal grid frequency	50, 60 Hz	

AC Output

Nominal output power	20000 W	30000 W
Max. output apparent power	22000 VA	30000 VA
Nominal AC Output current	29.0 A	43.5 A
Max AC Output current	31.9 A	43.5 A
Nominal grid voltage	220/380 V, 230/400 V	
Nominal grid frequency	50, 60 Hz	
Displacement power factor [cos φ]	0.8 leading - 0.8 lagging	
THDi (Rated power)	< 3%	
AC Connection	Three Phase 3L + N + PE	

AC Output (Back-Up Mode)

EPS peak power	2 time of rated power, 10s	
EPS apparent power	20000 VA	30000 VA
Nominal voltage	220/380 V, 230/400 V	
Frequency	50 / 60 Hz	
Nominal current	29.0 A	43.5 A
Switch time	< 10 ms	
THDv	< 3%	

System Data

Max. efficiency	98.0%
Euro efficiency	97.7%
Battery charge/discharge efficiency	98.5% / 97.0%

General Data

Isolation Type	Transformerless
Standby consumption (night)	< 5 W
Operating temperature range	-35°C - +60°C (derating above +45°C)
Cooling concept	Fan cooling and natural convection
Relative humidity	0% - 100% without condensation
Storage temperature	-40°C - +70°C
Max. operation altitude	3000 m
Typical noise emission	< 45 dB
Overvoltage category	II (DC Input), III (AC Output)
Ingress protection	IP66
Mounting system	Wall bracket
Dimensions (H×W×D)	696 x 526 x 240 mm
Weight	47 kg
Warranty	10 years

Interface

AC Output	Terminal block
PV Connection	MC4 or compatible connectors
Back-up line Connection	Terminal block
Battery	Connectors
LCD	LCD
Monitoring Dongle	Wi-Fi + LAN (PSI-X-H-WIFI-ETH module included) Dongle (USB port for Wi-Fi/Ethernet module).
Communication Interfaces	COM 1 (including Parallel-1, Parallel-2, BMS-1, BMS-2, RS485, DRM). COM 2 (including Ripple control, DI, DO, Meter/CT)

Protection

Anti-islanding protection	Integrated
Reverse polarity battery protection	Integrated
Insulation monitoring	Integrated
Residual current monitoring	Integrated
AC overcurrent protection	Integrated
AC short-circuit protection	Integrated
AC overvoltage protection	Integrated
Over-heat protection	Integrated
AFCI	Optional
Battery reverse charging from grid	Integrated
SPD	Type II, DC and AC

Certifications

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