

## PSI-XCAB-X3P50-B100

## PSI-XCAB-X3P50-B200

PSI-XCAB SERIES | HYBRID ESS CABINET FOR C&I



### HIGH-PERFORMANCE LITHIUM BATTERIES

To ensure safety and stable charging



### INTELLIGENT MANAGEMENT SYSTEM



### ADVANCED SAFETY

Fire-resistant materials, overvoltage, overcurrent, overheating protection, and a 4-level fire protection system

### Robust

Supports both on-grid and off-grid operation  
Robust backup capacity, switching time < 10 ms  
Up to 150% EPS output for 10 seconds  
Supports unbalanced loads across three phases

### Intelligent

AI-ready, solar generation and load consumption forecasting  
Intelligent energy management strategy  
Supports smart scene functions and intelligent load management (e.g., heat pump, electric vehicle charger)  
Supports microgrids and various scenarios  
Supports remote O&M 24/7 and scheduled implementation  
Supports solutions with wireless meters

### Safe

Four-level fire protection  
IP66 protection for the inverter and IP55 for the cabinet  
Optional AFCI  
Type II SPD for AC and DC, continuously protecting the inverter  
Smart IV curve scanning for early panel diagnosis

### Cost-effective

Oversized photovoltaic input up to 200%  
Maximum input current of 40 A per MPPT, supports high-power solar panels  
Global MPPT scanning to maximize solar energy collection  
Advanced LFP battery, single cabinet with capacity up to 200 kWh, expandable to MWh

## DC Input

	PSI-XCAB-X3P50-B100	PSI-XCAB-X3P50-B200
Max. Recommended PV Power		100 kWp
Maximum Photovoltaic Input Voltage <sup>1)</sup>		1000 V
Startup Voltage		200 V
Nominal Photovoltaic Input Voltage		650 V
MPPT Voltage Range <sup>2)</sup>		160 - 950 V
Number of MPP Trackers / Strings per MPP Tracker		5 / (2 for MPPT)
Maximum Input Current per MPPT		40 A
Photovoltaic Field Short-Circuit Current per MPPT <sup>3)</sup>		50 A

## AC Output

Nominal Output Power	50 kW
Nominal Output Current	72.2 A
Maximum Apparent Power	55 kVA
Maximum DC Output Current	83.6 A
Nominal AC Voltage	3P4 W, 400 / 230, 380 / 220 V
Nominal AC Frequency	50 / 60 Hz
Adjustable Power Factor Range	1 (0.8 capacitive - 0.8 inductive)
THDi (Nominal Power)	< 3 %

## General Information

Dimensions (with Inverter) (L x H x D)	1310 x 2300 x 1140 mm	2070 x 2420 x 1200 mm
Dimensions (without Inverter) (L x H x D)	1020 x 2300 x 1150 mm	1680 x 2420 x 1200 mm
Weight (with Inverter)	1600 kg	2800 kg
Weight (without Inverter)	1500 kg	2700 kg
Operating Ambient Temperature Range	-30 ~ 55 °C	
Relative Humidity (without condensation)	0 - 95 %	
Max. Operating Altitude	3000 m	
Cooling System	Smart Air Cooling	
Input Protection	Cabinet: IP55; Inverter: IP66	
Fire Protection	Aerosol (Optional: Novec1230) / Water	
Topology	Non-insulated	

## Battery

Battery Type	LFP / 280 Ah	
Nominal Battery Capacity	100 kWh	200 kWh
Nominal Battery Voltage	358.4 V	716.8 V
Battery Voltage Range	280 - 408.8 V	560 - 817.6 V
Discharge Capacity	90 %	
Nominal Charge/Discharge Current	140 A	
Maximum Charge/Discharge Current	160 (80 x 2) A	

## Certificates

For a complete list of certificates, please refer to the website [www.peimar.com](http://www.peimar.com)

<sup>1</sup> The maximum input voltage represents the maximum DC voltage limit. Any higher DC input voltage could damage the inverter

<sup>2</sup> An input voltage that exceeds the MPPT voltage range could trigger the inverter's protection.

<sup>3</sup> The Isc current for a single photovoltaic input string is 35 A.



## PSI-XCAB-X3P50

PSI-XCAB SERIES | THREE-PHASE HYBRID INVERTER FOR C&I



- ✓ EQUIPPED WITH **AFCI**  
Optional
- ✓ **PEIMAR X PORTAL** FOR MONITORING  
Data reading and remote programming
- ✓ **5 MPPT**
- ✓ **IP66**

### Safe

IP66 protection level  
Type II SPD for AC & DC, always protecting the inverter  
Optional AFCI  
Smart IV Curve scanning for early panel diagnosis

### Durable

Enhanced backup capacity: switching time <10ms, up to 150% EPS power for 10s  
Off-grid operation

### Cost-effective

Maximum PV input 200%  
Maximum input current of 40 A per MPPT, supports high-power solar panels

### Intelligent

Smart scene function, intelligent load management  
Compatibility with aluminum AC cables  
Supports microgrid and a variety of scenarios, both on-grid and off-grid, with real-time power balancing between PCS and Hybrid  
7 x 24 programming mode

### PV Input

### PSI-XCAB-X3P50

Max. Recommended PV Power	100 kWp
Max. PV Input Voltage <sup>(1)</sup>	1000 V
Startup Voltage	200 V
Nominal PV Input Voltage	650 V
MPPT Voltage Range <sup>(2)</sup>	160 - 950 V
Number of MPP Trackers / Strings per MPP Tracker	5 / 2
Maximum Input Current per MPPT	40 A
Photovoltaic Field Short-Circuit Current per MPPT <sup>(3)</sup>	50 A

## AC Output

### PSI-XCAB-X3P50

Nominal Output Power	50 kW
Maximum Apparent Power	55 kVa
Nominal Output Current	72.5 A
Maximum DC Output Current	83.3 A
Nominal AC Voltage	3P4 W, 400 / 230, 380 / 220
Nominal AC Frequency	50 / 60
Adjustable Power Factor Range	1 (0.8 capacitive - 0.8 inductive)
THDi (Nominal Power)	< 3 %

## Batteria

Tipo di batteria	Ioni di Litio
Intervallo di tensione della batteria	180 - 820 V
Corrente massima di carica / scarica	160 (80 x 2) A
Potenza massima di carica / scarica	50 / 50

## EPS Output (with battery)

EPS Peak Output Power	55, long term / 75, 10s
Nominal EPS Output Voltage, Frequency	3P4 W, 400 / 230V, 380 / 220V; 50 / 60 Hz
Nominal EPS Output Power	50 kW
Switching Time	< 10 ms

## General Information

Maximum Efficiency	98 %
European Efficiency	97.2 %
Input Protection	IP66
Operating Ambient Temperature Range	- 35 ~ 60 °C
Maximum Operating Altitude	3000 m
Relative Humidity	0 - 100 %
Dimensions (L x H x D)	820 x 670 x 257 mm
Net Weight	< 100 kg
Cooling Concept	Smart Air Cooling
Topology	Non-insulated
Night Power Consumption	< 10 W
Surge Category for Grid / Battery / Photovoltaic	OVC III / OVC II / OVC II
Display	LCD (optional)

## Protections

Overvoltage/undervoltage protection	Integrated
DC isolation protection	Integrated
DC reverse polarity protection	Integrated
Grid monitoring	Integrated
DC injection monitoring	Integrated
Return current monitoring	Integrated
Residual current detection	Integrated
Anti-isolation protection	Integrated
Overheating protection	Integrated
Overvoltage protection (DC/AC)	Type II / Type II
Arc fault circuit interrupter (AFCI)	Optional

## Certificates

For a complete list of certificates, please refer to the website [www.peimar.com](http://www.peimar.com)

1. The maximum input voltage represents the maximum DC voltage limit. Any higher DC input voltage could damage the inverter

2. An input voltage that exceeds the MPPT voltage range could trigger the inverter's protection.

3. The Isc current for a single photovoltaic input string is 35 A.

# PSI-X-14.3CAB

C&I ESS CABINET | BATTERY PACK



- ✓ **SAFE AND DURABLE**  
280Ah Lithium Iron Phosphate Batteries for enhanced safety
- ✓ **FLEXIBILITY**  
Wall and floor mounting for various needs
- ✓ **COMPACT DIMENSIONS**
- ✓ **USES AREA NETWORK CONTROLLER**

## Safe

280Ah LFP Battery, safe and efficient  
Operational battery: -20°C to 53°C, 3000m  
IP20 Protection

## Flexible

14.3 kWh expandable battery  
Flexible configuration 1P16S

## Compact

Compact and space-saving solution

## Communication

Reliable and efficient communication  
Energy Conversion Systems (PCS)

## General Information

Battery Type	LFP 280Ah
Battery Capacity	14.3 kWh
Battery Configuration	1P16S
Nominal Battery Voltage	51.2 V
Battery Voltage Range	40 - 58.4 V
Weight	115 kg
Charge/Discharge Frequency	≤ 0.5 C
Dimensions (L x H x D)	461 x 228 x 778 mm
Operating Temperature Range	- 20 - 53 °C
Relative Humidity (without condensation)	0 - 95 %
Max Operating Altitude	3000 m
Input Protection	IP20
PCS Communication	CAN

## Certificates

For a complete list of certificates, please refer to the website [www.peimar.com](http://www.peimar.com)

1. The maximum input voltage represents the maximum DC voltage limit. Any higher DC input voltage could damage the inverter

2. An input voltage that exceeds the MPPT voltage range could trigger the inverter's protection.

3. The Isc current for a single photovoltaic input string is 35 A.