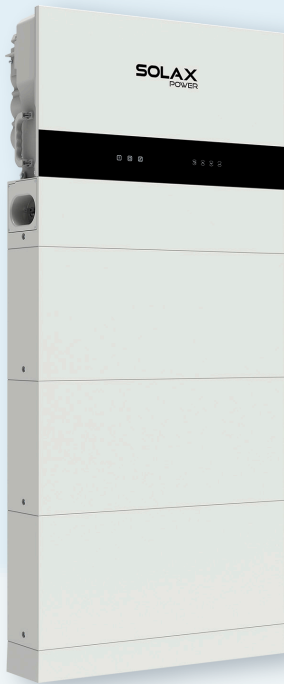


Single-Phase AC-Coupling ESS



X1-IES-A

3.7kW / 5.0kW / 6.0kW / 8.0kW



All in one design

- Plug and play, expandable and installation easily
- Light weighted, sleek and aesthetically pleasing
- Battery heating technology, -30°C extreme environment operation



Intelligent

- AI ready, forecasting solar generation and home consumption, smart energy management strategy
- VPP ready, SolaX cloud support resource aggregator(IEEE 2030.5, OpenADR)



Safe and Reliable

- IP66 protection level
- AC SPD type II, always guarding the inverter

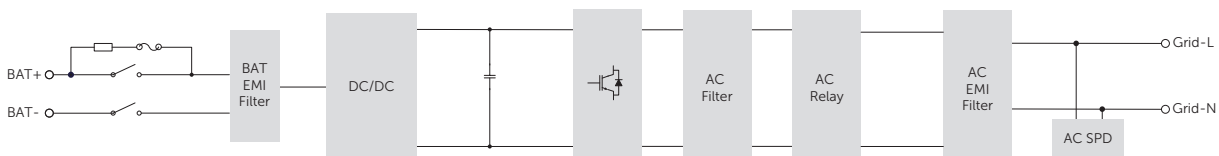


Economically

- Support intelligent loads management^①(e.g., Heat pump, EV charger), combining with 7x24h TOU to achieve efficient peak shaving
- Support Wireless meter solution

① DataHub1000 required

Circuit Diagram



X1-IES-3.7K-A
X1-IES-5K-A
X1-IES-6K-A
X1-IES-8K-A

AC INPUT & OUTPUT (ON-GRID)				
Rated output power	3680 W	5000 W (4600 for VDE4105, 4999 for AS4777)	6000 W	8000 W
Rated output current	16.0 A	21.8 A	26.1 A	34.8 A
Max. output apparent power	3680 VA	5000 VA (4600 for VDE4105, 4999 for AS4777, 5000 for C10/11)	6600 VA	8000 VA
Max. output continuous current	16.0 A	21.8 A	28.7 A	34.8 A
Nominal AC voltage	1 / N / PE, 220 / 230 / 240 V			
Max. AC input apparent power	7360 VA	9200 VA		
Max. AC input current	32.0 A	40.0 A		
Short-circuit current (Icc)	6k VA			
Nominal AC frequency	50 Hz / 60 Hz			
AC frequency range①	50 ± 5 Hz / 60 ± 5 Hz			
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)			
THDi (rated power)	< 3%			
BATTERY				
Battery voltage range	80- 480 V			
Communication interfaces	CAN / RS485			
BMS module	TBMS-MCS0800E			
Battery module	TP-HS50E			
Composition	TBMS-MCS0800E + TP-HS50E * n + Base Dimensions + Series Box (Required for two columns)			
Battery type	Li-ion (LFP)			
Nominal capacity / Nominal capacity②	5.1 kWh / 50 Ah			
Usable energy③	4.6 kWh			
Standard power	3 kW			
Max power	5.1 kW			
Max. charge / discharge current④	50 A			
Cycle life	> 6000 cycles			
Warranty	10 years			
Safety	CE, RCM, TUV (IEC62619), RoHS, REACH			
TBMS-MCS0800E dimensions (W × H × D) / Weight	730 × 165 × 150 mm / 9.3 kg			
TP-HS50E dimensions (W × H × D) / Weight	730 × 318 × 150 mm / 47 kg			
Base dimensions (W × H × D) / Weight	730 × 75 × 150 mm / 3.9 kg			
Series box dimensions (W × H × D) / Weight	167 × 91.5 × 121 mm/ 1.3 kg			
EFFICIENCY				
Max. efficiency	97.6%			
European efficiency	97.0%			
ENVIRONMENT LIMIT				
Ingress protection	IP66			
Operating ambient temperature range⑤	-35 ~ 60°C (derating at 45°C)			
Max. operating altitude	3000 m			
Relative humidity	0 ~ 100% RH (condensing)			
GENERAL				
Dimensions (W × H × D)	717 × 350 × 210 mm			
Net weight	10.7 kg			
Cooling concept	Nature cooling			
Communication interfaces	RS485, Pocket-X, CAN, DO, DI			
Power consumption (night)	< 40 W for hot standby, < 5 W for cold standby			
Topology	Non-isolated			
Certificates and approvals	IEC62109-1 / IEC62109-2, VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / G99 / AS4777 / EN50549 / CEI 0-21			
PROTECTION				
Protections	Over voltage protection, Residual current detection, Over temperature protection			
Active anti-islanding method	Frequency shift			
Surge protection	AC: Type II			

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter

② Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge.

③ System usable energy may vary with inverter different settings.

④ Discharge: In case of the battery cell's temperature range of -20°C~10°C and 45°C~53°C, the discharge current will be reduced; Charge: In case of the battery cell's temperature range of 0°C~25°C and 45°C~53°C, the charge current will be reduced. Product charge or discharge power depends on the actual temperature of the battery pack.

⑤ Derating above +45°C.