Single-Phase AC-Coupling ESS

X1-IES-A

3.7kW / 5kW / 6kW / 8kW

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

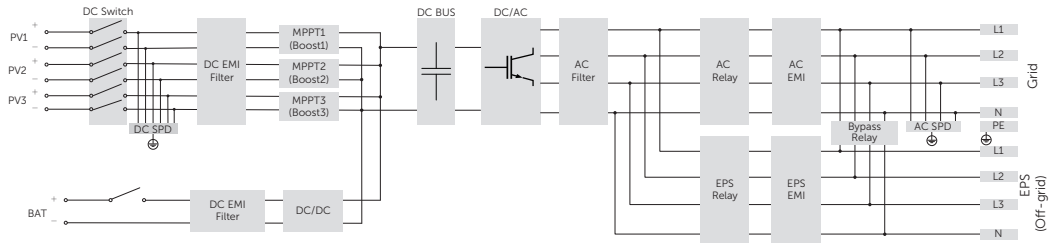
- IP66 protection level
- AC SPD type II, always guarding the inverter
- AFCI optional

Economically

- Support intelligent loads management①(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
INPUT AC				
Nominal AC power [VA]	3680	5000	6000	8000
Max. AC current [A]	16	21.8	28.7	34.8
Rated grid frequency [Hz]	50 / 60			
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
OUTPUT AC (On-Grid)				
Nominal AC power [VA]	3680	5000	6000	8000
Max. apparent AC power [VA]	3680	5000 (4600 for VDE4105, 4999 for AS4777, 5000 for C10/11)	6600	8000
Rated grid voltage(AC voltage range) [V]	220 / 230 / 240			
Rated grid frequency [Hz]	50 / 60			
Rated AC output current [A]	16	21.8	26.1	34.8
Max. AC current [A]	16.8	22.8	30	36.4
Displacement power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Total harmonic distortion (THDi, rated power) [%]	< 3			
BATTERY				
Battery voltage range [V]	80- 480			
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 [kWh] / Nominal capacity [Ah] ①	5.1 / 50			
Usable energy [kWh] ②	4.6			
Standard power [kW]	3			
Max power [kW]	5.1			
Max. charge / discharge current [A] ③	50			
Cycle life [Cycles]	> 6000			
Warranty [Years]	10			
Safety	CE, RCM, TUV (IEC62619), RoHS, REACH			
TBMS-MCS0800E dimensions(W × H × D) [mm] / Weight [kg]	730 × 165 × 150 / 9.3			
TP-HS50E dimensions(W × H × D) [mm] / Weight [kg]	730 × 318 × 150 / 47			
Base dimensions(W × H × D) [mm] / Weight [kg]	730 × 75 × 150 / 3.9			
Series box dimensions(W × H × D) [mm] / Weight [kg]	167 × 91.5 × 121 / 1.3			
GENERAL DATA (INVERTER)				
Dimensions (W × H × D) [mm]	717 × 350 × 210			
Operating temperature range [°C]	– 35 to 60 (derating at +45)			
Protection class	IP66			
Relative humidity [%]	0 to 100 (condensing)			
Storage temperature [°C]	- 40 to 65			
Noise emission (typical) [dB(A)]	< 35			
PROTECTION				
AFCI	OPT			
SPD	Type II, AC			
STANDARD				
Safety	IEC62477 / IEC62109-1 / IEC62109-2			
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3			
Certification	VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 /G98/G99/ AS4777 / EN50549/ CEI 0-21			

① Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge.
② System usable energy may vary with inverter diffffferent setting.
③ Discharge: In case of 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 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 battery pack.

**V1.0. Information may be subject to modify without notice.*