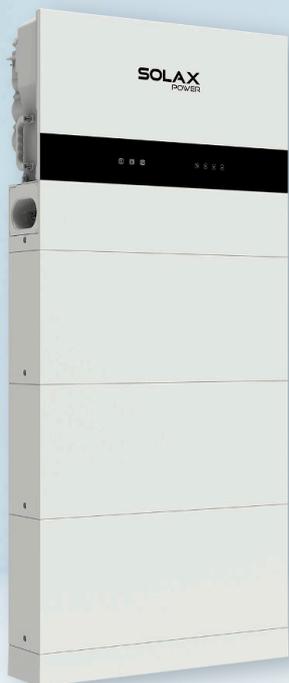


Single-Phase AC-Coupling ESS



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

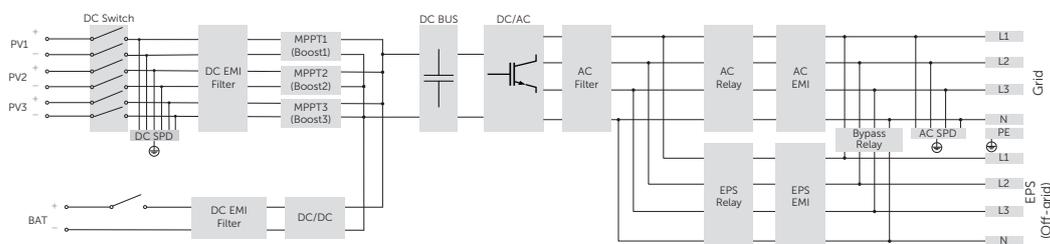


Economically

- Support intelligent loads 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

| 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 different 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.