Single-phase Residential On-grid Inverter



X1-SMART-G2

5kW / 6kW / 7kW / 8kW
9kW / 10kW

High Efficiency

- 3 MPP trackers for multi-orientation
- Max. 20A PV input current
- 200% PV oversizing & 110% AC overloading
- Built-in global MPP scan

Assured Safety

- Type II SPD on AC&DC side
- Ready for Rapid Shutdown function
- AFCI support (optional)

Intelligent Design

- Plug-and-Play communication terminal
- 10s data refresh interval & 24h consumption monitoring
- I-V Curve diagnosis

Flexible Adaptability

- Supports parallel operation for up to 5 inverters, no external EMS required
- Smart loads management (e.g., heat pump, smart EV charger)

solaxpower
www.solaxpower.com
info@solaxpower.com
+86 571-56260008

V1.2. Information may be subject to modify without notice. 650.00059.00

	X1-SMT-5K-G2	X1-SMT-6K-G2	X1-SMT-7K-G2	X1-SMT-8K-G2	X1-SMT-9K-G2	X1-SMT-10K-G2
PV INPUT						
Max. recommended PV array power	10 kWp	12 kWp	14 kWp	16 kWp	18 kWp	20 kWp
Max. PV input voltage①	600 V					
Nominal PV input voltage	360 V					
Operating voltage range	35 ~ 600 V					
MPPT voltage range②	40 ~ 560 V					
Start-up voltage	50 V					
No. of MPP trackers / Strings per MPP tracker	3 / (1 / 1 / 1)					
Max. input current per MPPT	20 A / 20 A / 20 A					
Max. input short circuit current per MPPT	25 A / 25 A / 25 A					
AC OUTPUT						
Rated output power	4999 W	6000 W	7000 W	8000 W	9000 W	9999 W
Rated output current	21.8 A	26.1 A	30.5 A	34.8 A	39.2 A	43.5 A
Max. output apparent power	4999 VA	6600 VA	7700 VA	8800 VA	9900 VA	9999 VA
Max. output continuous current	22.8 A	30.0 A	35.0 A	40.0 A	45.0 A	45.5 A
Nominal AC voltage	1 / N / PE, 220 / 230 / 240 V					
Nominal AC frequency	50 Hz / 60 Hz					
AC frequency range③	50 ± 5 Hz / 60 ± 5 Hz					
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)					
THDi (Rated power)	< 3%					
EFFICIENCY						
Max. efficiency	98.2%					
European efficiency	97.5%					
ENVIRONMENT LIMIT						
Ingress protection	IP66					
Operating ambient temperature range	-25 ~ 60°C					
Max. operating altitude	4000 m					
Relative humidity	0 ~ 100%RH (condensing)					
Overvoltage Category	Mains: III, PV: II					
GENERAL						
Dimensions (W × H × D)	515 × 370 × 170 mm					
Net weight	19.5 kg					
Cooling concept	Nature cooling					
Communication interfaces	RS485, DRM, CT, Meter, WiFi, LAN, 4G, WiFi+LAN, WiFi+4G					
Power consumption (night)	< 3 W					
Topology	Non-isolated					
Certificates and approvals	IEC/EN 62109-1/-2, AS 4777.2:2020, G99, INMETRO, IEC61727					
PROTECTION						
Protection	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Anti-islanding protection, Over temperature protection, DC reverse-polarity protection					
Active anti-islanding method	Frequency Shift					
Surge protection (DC / AC)	DC: Type II, AC: Type II					
Arc-fault circuit interrupter (AFCI)	Optional					

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter
② Input voltage exceeding the MPPT voltage range may trigger inverter protection
③ The AC frequency range may vary from different country codes