

Single-phase Residential On-grid Inverter



X1-BOOST-G4

2.5kW / 3.0kW / 3.3kW / 3.6kW
4.0kW / 4.2kW / 5.0kW / 6.0kW



High Efficiency

- 200% PV oversizing and 16A input to support high-power panels
- 50V startup voltage
- Built-in export control



Assured Safety

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



Intelligent Design

- 10s data refresh on SolaX Cloud
- Easy configuration via WiFi & App
- 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)

PV INPUT								
Max. recommended PV array power	6.0 kWp	6.0 kWp	6.6 kWp	7.2 kWp	8.0 kWp	8.0 kWp	10.0 kWp	12.0 kWp
Max. PV input voltage ^①	600 V							
Nominal PV input voltage	360 V							
Operating voltage range	35 ~ 600 V							
MPPT voltage range ^②	40 ~ 560 V							
Start-up voltage	50 V							
No. of MPP trackers / Strings per MPP tracker	2 / (1 / 1)							
Max. input current per MPPT(MPPT1/2)	16 A / 16 A							
Max. input short circuit current per MPPT(MPPT1/2)	22 A / 22 A							
AC OUTPUT								
Rated output power	2500 W	3000 W	3300 W	3680 W	4000 W	4200 W	5000 W ^③	6000 W
Rated output current	10.9 A	13.1 A	14.4 A	16.0 A	17.4 A ^④	18.3 A	21.7 A	26.1 A
Max. output apparent power	2750 VA	3300 VA	3630 VA	4048 VA ^⑤	4000 VA	4620 VA	5000 VA ^⑥	6000 VA
Max. output continuous current	12.0 A	14.4 A	15.8 A	17.6 A ^⑦	17.4 A ^⑧	20.1 A	21.7 A ^⑨	27.3 A
Nominal AC voltage	1 / N / PE, 220 / 230 / 240 V							
Nominal AC frequency	50 Hz / 60 Hz							
AC frequency range ^⑩	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	98.0%							
European efficiency	97.0%							
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)	404 × 274 × 146 mm							
Net weight	11.0 kg						11.5 kg	
Cooling concept	Nature cooling							
Communication interfaces	RS485, DRM, Optional: Meter, CT							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certificates and approvals	IEC/EN 62109-1/-2, IEC61727, EN50549, G98/G99, AS 4777.2, VDE4105, CEI 0-21, VFR, PPDS, TOR							
AC auxiliary power supply (APS)	Optional							
PROTECTION								
Protection	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, DC reverse-polarity protection							

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 5000 (4600 for VDE4105, 4999 for AS4777.2)

④ 17.4(16 For G98)

⑤ 4048 (3680 For G98/G99, TOR and PPDS)

⑥ 5000 (4600 for VDE4105, 4999 for AS4777.2)

⑦ 17.6 (16 For G98/G99, TOR and PPDS)

⑧ 17.4(16 For G98)

⑨ 21.7 (20 for VDE4105)

⑩ The AC frequency range may vary from different country codes