

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)

*V1.6.1. Information may be subject to modify without notice. 650.00029.00

	X1-BOOST-2.5K-G4	X1-BOOST-3K-G4	X1-BOOST-3.3K-G4	X1-BOOST-3.6K-G4	X1-BOOST-4K-G4	X1-BOOST-4.2K-G4	X1-BOOST-5K-G4	X1-BOOST-6K-G4
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