Single-phase Residential On-grid Inverter

X1-MINI-G4

0.6kW / 0.7kW / 0.8kW / 1.1kW / 1.5kW
2.0kW / 2.5kW / 3.0kW / 3.3kW

High Efficiency

- 200% PV oversizing and 16A input to support high-power panels
- Ultra-Wide MPPT voltage range
- Global MPP tracking with shade optimization

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
- 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. 650.00030.00*

	X1-MINI-0.6K-G4	X1-MINI-0.7K-G4	X1-MINI-0.8K-G4	X1-MINI-1.1K-G4	X1-MINI-1.5K-G4	X1-MINI-2.0K-G4	X1-MINI-2.5K-G4	X1-MINI-3.0K-G4	X1-MINI-3.3K-G4
PV INPUT									
Max. recommended PV array power	1.2 kWp	1.4 kWp	1.6 kWp	2.2 kWp	3 kWp	4 kWp	5 kWp	6 kWp	6.6 kWp
Max. PV input voltage①	450 V						550 V		
Nominal PV input voltage	360 V								
Operating voltage range	35 ~ 450 V						35 ~ 550 V		
MPPT voltage range②	40 ~ 450 V						40 ~ 550 V		
Start-up voltage	50 V								
No. of MPP trackers / Strings per MPP tracker	1 / 1								
Max. input current per MPPT	16 A								
Max. input short circuit current per MPPT	22 A								
AC OUTPUT									
Rated output power	600 W	700 W	800 W	1100 W	1500 W	2000 W	2500 W	3000 W	3300 W
Rated output current③	2.6 A	3.1 A	3.5 A	4.8 A	6.5 A	8.7 A	10.9 A	13.1 A	14.4 A
Max. output apparent power	600 VA	770 VA	800 VA	1210 VA	1650 VA	2200 VA	2750 VA	3300 VA	3300 VA
Max. output continuous current③	3.0 A	3.5 A	3.7 A	5.5 A	7.5 A	10.0 A	12.5 A	15.0 A	15.0 A
Nominal AC voltage	1 / N / PE, 220 / 230 / 240 V								
Nominal AC frequency	50 Hz / 60 Hz								
AC frequency range④	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	96.0%				97.0%				
ENVIRONMENT LIMIT									
Ingress protection	IP66								
Operating ambient temperature range⑤	-25 ~ 60°C								
Max. operating altitude⑥	4000 m								
Relative humidity	0 ~ 100%								
Overvoltage Category	Mains: III, PV: II								

GENERAL		
Dimensions (W × H × D)	290 × 206 × 120 mm	
Net weight	5.2 kg	5.5 kg
Cooling concept	Nature cooling	
Communication interfaces	RS485, DRM, Meter / CT (Optional)	
Power consumption (night)	< 1 W	
Topology	Non-isolated	
Certificates and approvals	EN / IEC62109-1/ 2, IEC61727, EN50549, G98 G99, AS 4777.2, VDE4105, CEI 0-21, VFR	
AC auxiliary power supply (APS)	Optional	
PROTECTION		
Protection	Over / under voltage protection, DC isolation protection, Grid monitoring, DC injection monitoring, DC reverse-polarity protection, Back feed current monitoring, Residual current detection, Over temperature protection, Monitoring ground fault protection, String fault detection, AC overcurrent protection, AC short-circuit protection	
Active anti-islanding protection	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 two data refer to different grid voltage 220V/230V (75~125kW models) or 500V/540V (136~150kW models)
④ The AC frequency range may vary from different country codes
⑤ Derating above +45°C
⑥ Derating above 3000 m