

Single-phase Residential On-grid Inverter



X1-MINI G4 PLUS

5kW / 6kW



High Efficiency

- 20A input to support high-power panels
- Extremely high power density
- Ultra-wide MPPT voltage range



Assured Safety

- Type II SPD on AC & DC side
- Built-in export control function



Intelligent Design

- Global MPP tracking with shade optimization
- I-V curve diagnosis



Flexible Adaptability

- Supports parallel operation for up to 5 inverters, no external EMS required
- Maintains full power up to 50°C

** Feature to be upgraded in the future*

X1-MINI-5K-G4-P

X1-MINI-6K-G4-P

PV INPUT		
Max. recommended PV array power	7.5 kWp	7.8 kWp
Max. PV input voltage ^①	600 d.c. V	
Rated PV input voltage	360 d.c. V	
Operating voltage range	40 ~ 550 d.c. V	
Start-up voltage	50 d.c. V	
No. of MPP trackers / strings per MPP tracker	1/1	
Max. input current per MPPT	20 d.c. A	
Max. input short circuit current per MPPT	25 d.c. A	
AC INPUT & OUTPUT (ON-GRID)		
Rated output apparent power	5 kVA	6 kVA
Rated output current	21.7 a.c. A	26.1 a.c. A
Max. output apparent power	5.5 kVA	6 kVA
Max. output continuous current	23.9 a.c. A	26.1 a.c. A
Rated AC voltage	230 a.c. V	
Rated AC frequency	50 Hz	
AC frequency range ^②	50 ± 5 Hz	
Adjustable power factor range	~1 (0.8 lagging to 0.8 leading)	
EFFICIENCY		
Max. efficiency	98.0%	
European efficiency	97.0%	
ENVIRONMENT LIMIT		
Ingress protection	IP66	
Operating temperature range	-25 ~ 60°C	
Max. operating altitude	4000 m	
Relative humidity	4 ~ 100% RH (condensing)	
Overvoltage category	Mains: III, PV: II	
GENERAL		
Dimensions (W × H × D)	330 × 235 × 145 mm	
Net weight	7.5 kg	
Cooling concept	Natural cooling	
Communication interfaces	RS485, optional: Pocket WiFi / 4G, CT / meter	
Power consumption (night)	< 1 W	
Topology	Non-isolated	
Certifications	IEC61727, EN/IEC62109-1/2	
AC auxiliary power supply (APS)	No	
PROTECTION		
Protections	Over / under voltage protection, DC isolation protection, Grid monitoring, DC injection monitoring, Backfeed current monitoring, Residual current detection, Over temperature protection, AC overcurrent protection, AC short-circuit protection	
Surge protection (DC / AC)	DC: Type II , AC: Type II	

① The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter

② The AC frequency range may vary from different country codes