

Three-phase Residential On-grid Inverter



X3-PRO G2

8kW/10kW/12kW/15kW
17kW/20kW/25kW/30kW



High Efficiency

- Up to 98.5% efficiency
- 32A per MPP tracker
- 150% DC oversizing & 110% AC overloading output
- Built-in global MPP scan
- Low startup voltage & ultra-wide MPPT range



Intelligent Design

- IP66 protection degree
- Ultra-high power density
- 24h monitoring (WiFi/LAN/4G)
- Smart loads management (e.g., heat pump, smart EV charger)



Assured Safety

- Type II SPD on AC&DC side
- AFCI support (optional)*



Flexible Adaptability

- Built-in export power control function

** Feature to be upgraded in the future*

PV INPUT								
Max. recommended PV array power	12.0 kWp	15.0 kWp	18.0 kWp	22.5 kWp	25.5 kWp	30.0 kWp	37.5 kWp	45.0 kWp
Max. PV input voltage ^①	1100 V							
Nominal PV input voltage	650 V							
Operating voltage range	135 ~ 985 V							
MPPT voltage range ^②	160 ~ 980 V							
Start-up voltage	200 V							
No. of MPP trackers / Strings per MPP tracker	2 / (2 / 2)						3 / (2 / 2 / 2)	
Max. input current per MPPT	32 A							
Max. input short circuit current per MPPT	40 A							
AC OUTPUT								
Rated output power	8 kW	10 kW ^④	12 kW	15 kW ^⑤	17 kW	20 kW	25 kW	30 kW ^⑥
Rated output current	12.2 A	15.2 A	18.2 A	22.8 A	25.8 A	30.3 A	37.9 A	45.5 A
Max. output apparent power	8.8 kVA	11.0 kVA ^④	13.2 kVA	16.5 kVA ^⑤	18.7 kVA	22.0 kVA	27.5 kVA	30.0 kVA ^⑥
Max. output continuous current	13.2 A	16.0 A	19.3 A	24.2 A	27.5 A	33.6 A	41.8 A	45.5 A
Nominal AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V							
Nominal AC frequency	50 Hz / 60 Hz							
AC frequency range ^③	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%			98.3%			98.5%	
European efficiency	97.7%			97.8%			98.0%	
ENVIRONMENT LIMIT								
Ingress protection	IP66							
Operating ambient temperature range	-30 ~ 60°C							
Max. operating altitude	4000 m							
Relative humidity	0 ~ 100 % RH (condensing)							
Overvoltage Category	Mains: III / PV: II							
GENERAL								
Dimensions (W × H × D)	482 × 417 × 186 mm							
Net weight	24.5 kg			26.0 kg			28.0 kg	
Cooling concept	Nature cooling			Smart cooling				
Communication interfaces	RS485/DRM, Optional: Meter							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certificates and approvals	VDE4105, EN 50549, AS 4777.2, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530, NB/T 32004, IEC/EN 62109-1, IEC/EN 62109-2							
AC auxiliary power supply (APS)	Optional							
PROTECTION								
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Over temperature protection, AC overcurrent protection, AC short-circuit 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

④ 9999 for AS4777.2

⑤ 14999 for AS4777.2

⑥ 29999 for AS4777.2