

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