

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 start up voltage & ultra-wide MPPT range



Intelligent Design

- IP66 ingress protection
- 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
- Ultra-high power density

* 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							
Rated PV input voltage	650 V							
Operation 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 ^③	12 kW	15 kW ^④	17 kW	20 kW	25 kW	30 kW ^⑤
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 ^⑥	13.2 kVA	16.5 kVA ^⑥	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
Rated AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V							
Rated 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							
Operation temperature range	-30 ~ 60°C							
Max. operation 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	Natural cooling			Smart air cooling				
Communication interfaces	RS 485 / DRM, optional: meter							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certifications	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 W / VA for AS4777.2

⑤ 14999 W / VA for AS4777.2

⑥ 29999 W / VA for AS4777.2