

Three-phase Residential On-grid Inverter



X3-MIC G2

3kW / 4kW / 5kW / 6kW
8kW / 10kW / 12kW / 15kW



High Efficiency

- Up to 98.3% efficiency
- 32A per MPP tracker
- 200% DC oversizing & 110% AC overloading output
- Built-in global MPP scan
- Low start-up voltage & ultra-wide MPPT range



Assured Safety

- Type II SPD on AC & DC side (optional)
- AFCI support (optional)
- IP66 ingress protection



Intelligent Design

- 24h monitoring (WiFi / LAN / 4G)
- Smart loads management (e.g. heat pump, smart EV charger)



Flexible Adaptability

- Built-in export power control function
- Ultra-high power density

X3-MIC-3K-G2 X3-MIC-4K-G2 X3-MIC-5K-G2 X3-MIC-6K-G2 X3-MIC-8K-G2 X3-MIC-10K-G2 X3-MIC-12K-G2 X3-MIC-15K-G2

PV INPUT								
Max. recommended PV array power	6 kWp	8 kWp	10 kWp	12 kWp	16 kWp	20 kWp	24 kWp	30 kWp
Max. PV input voltage ^①	1000 V							
Rated PV input voltage	640 V							
Operation voltage range	100 ~ 985 V							
MPPT voltage range ^②	120 ~ 980 V							
Start-up voltage	150 V							
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)					2 / (1 / 1)	2 / (2 / 1)	
Max. input current per MPPT	16 A / 16 A					16 A / 16 A	32 A / 16 A	
Max. input short circuit current per MPPT	20 A / 20 A					20 A / 20 A	40 A / 20 A	
AC OUTPUT								
Rated output power	3000 W	4000 W	4999 W	6000 W	8000 W	9999 W	12000 W	14999 W
Rated output current	4.6, 4.4 A	6.1, 5.8 A	7.6, 7.3 A	9.1, 8.7 A	12.2, 11.6 A	15.2, 14.5 A	18.2, 17.4 A	22.7, 21.8 A
Max. output apparent power	3300 VA	4400 VA	4999 VA	6600 VA	8800 VA	9999 VA	13200 VA	14999 VA
Max. output continuous current	4.8 A	6.4 A	8.0 A	9.6 A	12.8 A	16.0 A	19.1 A	22.7 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	98.3%							
European efficiency	97.8%							
ENVIRONMENT LIMIT								
Ingress protection	IP66							
Max. operation altitude	4000 m							
Relative humidity	4 ~ 100% RH (condensing)							
Overvoltage category	Mains: III / PV: II							
Operation temperature	-30~60°C							
GENERAL								
Dimensions (W × H × D)	342 × 434 × 144.5 mm				342 × 434 × 156 mm			
Net weight	15.5 kg				17.0 kg		18.0 kg	
Cooling concept	Natural cooling				Smart air cooling			
Communication interfaces	RS485 / DRM, optional: meter							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certifications	VDE4105, EN 50549, AS 4777.2, VDE4105, G98/G99, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530, NB/T 32004 IEC/EN 62109-1, IEC/EN 62109-2							
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)	Type II / Type II (optional)							
Arc-fault circuit interrupter (AFCI)	Optional							
AC auxiliary power supply (APS)	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