

Three-phase C&I On-grid Inverter



X3-MEGA G2

40kW / 50kW / 60kW



High Efficiency

- Up to 98.4% efficiency
- 32A per MPP tracker
- 180~1000Vdc MPPT voltage range
- 150% PV oversizing, 110% overloading output



Assured Safety

- IP66 protection degree
- Type II SPD on DC & AC side
- String current monitoring
- 24 hours operation monitoring



Intelligent Design

- Night-time reactive power compensation
- Smart air cooling enhances fan longevity
- Heat dissipation reduces system weight & size by over 10%
- I-V Curve diagnosis



Flexible Adaptability

- Built-in export power control function
- Remote setting and upgrading
- Aluminium AC cable connection available
- Max. 6 MPPTs, 2 strings per MPP tracker

X3-MGA-40K-G2
X3-MGA-50K-G2
X3-MGA-60K-G2

PV INPUT			
Max. recommended PV array power	60 kWp	75 kWp	90 kWp
Max. PV input voltage ^①	1100 d.c. V		
Rated PV input voltage	580 d.c. V@220 a.c. V 600 d.c. V@230 a.c. V		
MPPT voltage range ^②	180 ~ 1000 d.c. V		
Start-up voltage	200 d.c. V		
No. of MPP trackers / strings per MPP tracker	4 / 2	5 / 2	6 / 2
Max. input current per MPPT	32 d.c. A		
Max. input short circuit current per MPPT	46 d.c. A		
AC INPUT & OUTPUT (ON-GRID)			
Rated output apparent power	40 kVA	50 kVA	60 kVA
Rated output current	60.6 a.c. A@220 a.c. V 58 a.c. A@230 a.c. V	75.8 a.c. A@220 a.c. V 72.5 a.c. A@230 a.c. V	90.9 a.c. A@220 a.c. V 87 a.c. A@230 a.c. V
Max. output apparent power	44 kVA	55 kVA	66 kVA
Max. output continuous current	66.7 a.c. A@220 a.c. V 63.8 a.c. A@230 a.c. V	83.3 a.c. A@220 a.c. V 79.7 a.c. A@230 a.c. V	100 a.c. A@220 a.c. V 95.7 a.c. A@230 a.c. V
Rated AC voltage	3W / (N) / PE, 220 / 380 a.c. V 3W / (N) / PE, 230 / 400 a.c. V		
Rated AC frequency	50 Hz / 60 Hz		
AC frequency range ^③	50 ± 5 / 60 ± 5 Hz		
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)		
EFFICIENCY			
Max. efficiency	98.4%		
European efficiency	98.1%		
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)	630 × 521 × 286 mm		
Net weight	44 kg	45 kg	46 kg
Cooling concept	Smart air cooling		
Communication interfaces	RS485, DRM, DI/DO		
Power consumption (night)	< 2 W		
Topology	Non-isolated		
Certifications	IEC/EN 62109-1, IEC/EN 62109-2, NB/T 32004, EN 50549, AS4777.2, VDE4105, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530		
AC auxiliary power supply (APS)	Built-in		
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		
Surge protection	DC: Type II, AC: Type II		
Arc-fault circuit interrupter (AFCI)	Optional		
Anti-PID	External		

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ The AC frequency range may vary from different country codes