

Three-phase Residential On-grid Inverter



MIC G3

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



High Efficiency

- 98.6% ultra-high efficiency with SiC technology
- Wide MPPT & low start-up voltage for more yield
- Max. 20A input current per MPPT
- 150% PV oversizing & 110% continuous AC output



Assured Safety

- AI-powered AFCI for ultimate safety (Optional)
- Type II DC/AC surge protection for lightning safety
- IP66 ingress protection and C5 corrosion resistance



Intelligent Design

- Direct CT connection for superior response speed
- 60% less grid feed-in with CT, grid-friendly and worry-free
- Unit-to-unit direct paralleling for seamless power control
- Online I-V curve scanning for smart string fault diagnosis



Flexible Adaptability

- Supports fuel-saving generator solutions
- 24/7 real-time monitoring via WiFi, LAN, or 4G

	MIC4T-S3	MIC5T-S3	MIC6T-S3	MIC8T-S3	MIC10T-S3	MIC12T-S3	MIC15T-S3
PV INPUT							
Max. recommended PV array power	6 kWp	7.5 kWp	9 kWp	12 kWp	15 kWp	18 kWp	22.5 kWp
Max. PV input voltage ^①	1100 d.c. V						
Rated PV input voltage	600 d.c. V						
Operation voltage range	120 V - 1000 d.c. V						
Start-up voltage	150 d.c. V						
No. of MPP trackers / Strings per MPP tracker	2 / (1 / 1)						
Max. input current per MPPT	20 d.c. A						
Max. input short circuit current per MPPT	25 d.c. A						
AC OUTPUT (ON-GRID)							
Rated output apparent power	4 kVA	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA	15 kVA
Rated output current	6.1 a.c. A @220 a.c. V	7.6 a.c. A @220 a.c. V	9.1 a.c. A @220 a.c. V	12.2 a.c. A @220 a.c. V	15.2 a.c. A @220 a.c. V	18.2 a.c. A @220 a.c. V	22.7 a.c. A @220 a.c. V
	5.8 a.c. A @230 a.c. V	7.3 a.c. A @230 a.c. V	8.7 a.c. A @230 a.c. V	11.6 a.c. A @230 a.c. V	14.5 a.c. A @230 a.c. V	17.4 a.c. A @230 a.c. V	21.8 a.c. A @230 a.c. V
Max. output apparent power	4.4 kVA	5.5 kVA	6.6 kVA	8.8 kVA	11 kVA	13.2 kVA	16.5 kVA
Max. output continuous current	6.7 a.c. A @220 a.c. V	8.4 a.c. A @220 a.c. V	10.0 a.c. A @220 a.c. V	13.4 a.c. A @220 a.c. V	16.7 a.c. A @220 a.c. V	20.0 a.c. A @220 a.c. V	25.0 a.c. A @220 a.c. V
	6.4 a.c. A @230 a.c. V	8.0 a.c. A @230 a.c. V	9.6 a.c. A @230 a.c. V	12.8 a.c. A @230 a.c. V	16.0 a.c. A @230 a.c. V	19.1 a.c. A @230 a.c. V	24.0 a.c. A @230 a.c. V
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 ^②	50 ± 5 Hz / 60 ± 5 Hz						
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)						
EFFICIENCY							
Max. efficiency	98.6%						
European efficiency	98.2%						
ENVIRONMENT LIMIT							
Ingress protection	IP66						
Operating temperature range	-30 – +60°C (> 45°C derating)						
Max. operating altitude	4000 m						
Relative humidity	4 – 100% RH (condensing)						
Overvoltage category	Mains: III, PV: II						
GENERAL							
Dimensions (W × H × D)	384 x 427 x 178 mm						
Net weight	12 kg						
Cooling concept	Natural cooling					Smart air cooling	
Communication interfaces	RS485, DI / DO Optional:Dongle (WIFI / LAN / 4G), Meter / CT						
Power consumption (night)	< 1 W						
Topology	Non-isolated						
Certifications	IEC 61727, IEC 62116, VDE4105, EN 50549, IEC/EN 62109-1, IEC/EN 62109-2						
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						

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

② The AC frequency range may vary from different country codes