iMars MG Series

Single Phase Grid-tied Solar Inverter

MG4KTL
MG4K6TL
MG5KTL
MG4KTL-2M
MG4K6TL-2M
MG5KTL-2M

Description

MG series single phase inverter is a new generation of PV string inverter which has been developed for residential users. MG series inverters have the advantages of compact size, light weight, easy installation and maintenance, and are above all cost efficient.

Features

- The core technologies are from Germany.
- Software optimization for the power grid with much wider adaptability.
- Global integrated monitoring and management, supporting all kinds of portable mobile devices. HMI is optional.
- Wider voltage range, lower starting voltage, higher conversion efficiency.
- Designed with latest thermal simulation technology for longer service life.

HMI Features

- Small and exquisite appearance.
- LCD display and easy to operate keyboard with multiple functions.
- Plug & play.

PASCAL

Specification

	MG4KTL	MG4K6TL	MG5KTL	MG4KTL-2M	MG4K6TL-2M	MG5KTL-2M
Input (DC)						
Rated DC input power (W)	4000	4600	5000	4000	4600	5000
Max. DC input power (W)	4500	5000	5500	4500	5000	5500
Starting power (W)	50					
Starting voltage /Min. operation voltage (V)	120/100					
MPPT range (V)	120~550					
Number of MPPT / String per MPPT	1/2			2/1		
Max. DC current (A) per MPPT x Number of MPPT	18x1	18x1	20x1	10x2	11x2	12x2
DC switch	Optional					
Output (AC)						
Rated power (W)	3680	4200	4600	3680	4200	4600
Max power (W)	4000	4600	5000	4000	4600	5000
Max. AC output current (A)	19	21	23	19	21	23
AC voltage range	230/180~277Vac					
	According to VDE-AR-N4105, G83/2, G59/3, AS4777/3100, CQC					
Grid frequency	50Hz (44~55Hz) / 60Hz (54~65Hz)					
	According to VDE-AR-N4105, G83/2, G59/3, AS4777/3100, CQC					
Power factor	≥0.99 (Adjustable)					
THD	< 3% (At Rated Power)					
AC connection	Single-phase (L, N, PE)					
System						
Cooling method	Natural Cooling method					
Max. efficiency	97.70%	97.70%	97.80%	97.90%	98.00%	98.00%
Euro-efficiency	96.50%	96.70%	96.80%	96.80%	96.80%	96.80%
MPPT efficiency	99%					
Degree of protection	IP65					
Self-consumption (at night)	<1W					
Topology	Transformerless					
Operating temperature range	-25℃~+60℃, (derate after 45℃)					
Relative humidity	0~95%, no condensation					
Protection	Over voltage protect; DC insulation monitoring; DC over current protection; monitoring; Grounding fault monitoring; island protection; Overheating protection; Electronic protection; Overvoltage and short circuit protection etc.					
Display and communication						
Display	LED Display (standard) / LCD (Optional)					
System language	English, Chinese, German, Dutch					
Communication interfaces:	RS485 (Standard), WiFi, Ethernet (Optional)					
Mechanical parameters						
Dimension (H x W x D mm)	405x360x150			460x360x150		
Weight (kg)	15			17		
Installation	Wall mounting					
Others						
DC terminal	BC03A, BC03B (PV-CF-S2, 5-6 (+) ....; PV-CM-S2, 5-6 (-)..., Helios H4 2.5mm^2)					
Certifications	VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100,CQCEN61000-6-1:4, EN61000-3-2:3, EN61000-11:12, IEC 62109-1:2010, LVRT					