

iMars Series Grid-tied Solar Inverters



Description

MG series single phase inverter is a new generation of PV string inverter which has been developed by INVT 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.



ACT witness Lab certified by TÜV SÜD



**G83/G59 C10/11
TF3.2.1 MEA PEA**



iMars PhoneExpert
(for iOS)



iMars PhoneExpert
(for Android)

Specification

	MG1KTL	MG2KTL	MG3KTL	MG4KTL	MG5KTL			
Input (DC)								
Max. DC input power (W)	1200	2200	3300	4800	6000			
Max. DC input voltage (V)	450		500		600			
Starting voltage /Min. operation voltage (V)		80/60			120/100			
MPPT Range(V)	60~400	100~410	120~450		120~550			
Number of MPPT/ String Per MPPT		1/1			1/2			
Max. DC current (A) per MPPT x Number of MPPT	9x1	12x1	15x1	19x1	23x1			
DC switch			Optional					
Output (AC)								
Rated output power (W)	1000	2000	3000	4000	5000			
Max. AC output current (A)	4.5	9	13	20	24			
Grid voltage range			230/180~277V					
Grid frequency range			50Hz (44~55Hz) / 60Hz (54~65Hz)					
Power factor			≥0.99 (at rated power)					
THD			< 3% (At Rated Power)					
AC output			Single-phase (L, N, PE)					
System								
Cooling method			Natural Cooling method					
Max. efficiency	96.90%	97.20%	97.30%	97.7%	97.8%			
Euro-efficiency	96.00%	96.10%	96.50%	96.5%	96.8%			
MPPT efficiency			99.9%					
Degree of protection			IP65					
Self-consumption(at night) (W)			<1					
Topology			Transformerless					
Operating temperature range			-25°C ~+60°C, (derate after 45°C)					
Relative humidity			0~95%, no condensation					
Protection	PV array insulation protection, PV array leakage current protection, Ground fault monitoring, Grid monitoring, Island protection, DC monitoring, Short current protection etc.							
Display and communication								
Display			LED Display (standard) /LCD (Optional)					
LCD language			English, Chinese, German, Dutch					
Communication interfaces:			RS485 (Standard), WiFi, Ethernet (Optional)					
Mechanical parameters								
Dimension (H x W x D mm)		280x300x138		405x360x150				
Weight (kg)		≤9.5		≤15				
Installation			Wall mounting					
Others								
DC terminal			MC4					
Grid standard	DIN VDE 0126-1-1:2013, VDE-AR-N 4105: 2011, DIN VDE V 0124-100: 2012, EN 50438: 2013, G83-2: 2012, IEC 61727(IEC62116), AS/NZS 4777.2: 2015, NB/T32004-2013, IEC 60068-2-1: 2007, IEC 60068-2-2: 2007, IEC 60068-2-14: 2009, IEC 60068-2-30: 2005, IEC 61683: 1999, C10/11, TF3.2.1							
Safe certificate /EMC category	IEC 62109-1: 2010, IEC 62109-2: 2011, EN 61000-6-2: 2005, EN 61000-6-3:2007/A1:2011							
Factory warranty (years)	5							



Sales E-mail: solar@invt.com.cn Service E-mail: solar-service@invt.com.cn Website: www.invtsolar.com