

iMars Series

Grid-tied Solar Inverters Catalog



G83/G59 C10/11 TF3.2.1 PEA MEA



invt

iMars M Series Single Phase Grid-tied Solar Inverters

- MG750TL
- MG1K1TL
- MG1K5TL
- MG2KTL
- MG3KTL
- MG3KTL-2M



Description

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

Features

- The core technology 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.
- Minimum working voltage is 50V.
- Wide voltage range, low 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.

Specification

	MG750TL	MG1K1TL	MG1K5TL	MG2KTL	MG3KTL	MG3KTL-2M
Input (DC)						
Max DC input power(W)	900	1200	1700	2200	3300	3300
Max DC Voltage (V)	400		450		500	600
Starting voltage (V)	65/50	80/60	100/80		120/100	
MPPT Operating Voltage Range (V)	60-350	80-400	100-410	120-410	120-450	120-550
Number of MPPT/ String Per MPPT		1/1			1/2	2/1
Rated input current (A)	8	9	10.5	14	18	10x2
Max. DC Current(A) Per MPPT	12	16	16	16	20	12
DC Switch	Optional					
Output (AC)						
Rated Power (W)	750	1100	1500	2000	3000	3000
Max. AC Output Current(A)	4.4	4.5	4.6	9	13	14
AC Voltage Range	230/180~277Vac According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100					
Grid Frequency	50Hz(44~55Hz) / 60Hz(54~65Hz) According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100					
Power Factor	≥0.99 (Adjustable)					
THD	< 3% (At Rated Power)					
AC Connection	Single-phase (L, N, PE)					
System						
Cooling	Natural cooling					
Max. Efficiency	96.80%	96.90%	97.20%	97.20%	97.30%	97.90%
Euro-efficiency	95.95%	96.00%	96.10%	96.10%	96.50%	96.80%
MPPT Efficiency	99%					
Protection Degree	IP65					
Consumption At Night	<1W					
Isolation Mode	Transformerless					
Operating Temperature	-25℃ ~ +60℃ (derate after 45℃)					
Relative Humidity	0~95%, no condensation					
Protection	Over voltage protect ;DC insulation monitoring; DC Over current Protection; Grounding fault monitoring; Grid protection; island protection; Overheating protection ; Overvoltage and short circuit protection etc.					
Display And Communication						
Display	LED Display (standard) /LCD(Optional)					
System Language	English ,Chinese,German, Dutch					
Communication Mode	RS485 (Standard); WiFi, Ethernet (Optional)					
Mechanical Parameters						
Dimension (H x W x D mm)	280x300x138					420x360x160
Weight (kg)	≤10.5					≤15
Installation	Wall mounting					
Others						
DC Terminal	MC4					
Certifications	VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100, EN61000-6-1:4, EN61000-3-2:3, EN61000-11:12; IEC 62109-1:2010					