

## iMars MG Series Single Phase Grid-tied Solar

**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.
- Minimum working voltage is 50V.
- 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

**Specification**

S-MG3 KTL	
<b>Input (DC)</b>	
Max. DC input power	3200 W
Max. DC voltage	500 V
Starting voltage /Min. operation voltage	120/100 V
Starting power	30 W
MPPT Operating Voltage Range	120-450 V
Number of MPPT/ String Per MPPT	1/2
Max. DC current (A) per MPPT x Number of MPPT	15x1
DC switch	Optional
<b>Output (AC)</b>	
Rated power	3000 W
Max. AC output current	13 A
AC voltage range	230/180~277 Vac
	According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100, CQC
Grid frequency	50Hz (44~55Hz) / 60Hz (54~65Hz)
	According to VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100, CQC
Power factor	≥ 0.99 (Adjustable)
THD	< 3% (At Rated Power)
AC connection	Single-phase (L, N, PE)
<b>System</b>	
Cooling method	Natural Cooling method
Max. efficiency	97.30%
Euro-efficiency	96.60%
MPPT efficiency	99%
Degree of protection	IP65
Self-consumption (at night)	<1W
Topology	Transformerless
Operating temperature range	25°C~+60°C, (derate after 45°C)
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.
<b>Display and communication</b>	
Display	LED Display (standard) /LCD (Optional)
System language	English, Chinese, German, Dutch
Communication interfaces:	RS485 (Standard), WiFi, Ethernet (Optional)
<b>Mechanical parameters</b>	
Dimension (H x W x D mm)	280x300x138 mm.
Weight (kg)	9.5 kg
Installation	Wall mounting
<b>Others</b>	
DC terminal	BC03A, BC03B ( PV-CF-S2, 5-6 (+) ....; PV-CM-S2, 5-6 (-)...., Helios H4 2.5mm <sup>2</sup> )
Certifications	VDE-AR-N4105, G83/2, C10/11, TF3.2.1, AS4777/3100, CQC, EN61000-6-1:4, EN61000-3-2:3, EN61000-11:12, IEC 62109-1:2010, LVRT
Factory warranty (years)	5 (standard) / 10, 15, 20 (optional)