

iMars Series Grid-tied Solar Inverters



Description

iMars BG three-phase grid-tied solar inverters adopt the latest technologies combination of T type three level topology and SVPWM, providing flexible system configuration and monitoring solutions for household, commercial and power plant systems.

Features

- Dual MPPTs work independently and allow unbalanced input power. One MPPT maximum input is up to 60% of Max.DC power.
- High efficiency and stable performance at entire input voltage and output power range.
- Max. efficiency is up to 98.3%.
- Wide input voltage range gives more possibilities for accepting different string configuration and different type of PV modules.
- Bus capacitors consist of advanced film capacitors, designed with the latest thermal simulation technology for longer lifespan.
- Integrated intelligent DC combiner and surge protection improve system flexibility and lower the cost.
- 5V 200mA auxiliary DC power interface is optional for system expansion.
- AC output power is adjustable between 1-100%.
- Reactive power control and power factor adjustable: 0.8 leading ~ 0.8 lagging.
- RS485, Ethernet, WIFI communication modes are optional for realizing multiple monitoring solutions via PC, mobile phones, internet etc. platforms.



ACT witness Lab certified by TÜV SÜD



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



Specification

	BG12KTR	BG15KTR	BG17KTR
Input (DC)			
Max. DC input power (W)	12500	15600	17500
Max. DC input voltage (V)		1000	
Starting voltage /Min. operation voltage (V)		200/180	
MPPT Range (V)		180- 800	
Number Of MPPT / String Per MPPT		2/2	
Max. DC Current (A) Per MPPT x Number Of MPPT	19x2	21x2	23x2
DC switch		Integrated	
Output (AC)			
Rated output power (W)	12000	15000	17000
Max. AC output current(A)	20	24	28
Grid voltage range	3/PE, 230/400V, (320~460V), 3/PE,220/380V, (320~460V)		
Grid frequency range	50Hz (47~51.5Hz) / 60Hz (57~61.5Hz)		
Power factor	-0.8~+0.8 (Adjustable)		
THDi	< 3% (at rated power)		
AC output	Three-phase (L1, L2, L3, PE) or (L1, L2, L3, N, PE)		
System			
Cooling method	Smart Cooling method		
Max efficiency	98.20%	98.30%	98.30%
Euro-efficiency	97.60%	97.80%	97.80%
MPPT efficiency		99.90%	
Protection rating	IP65		
Self-consumption (at night)(W)	<0.5		
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.		
Noise (dB)	< 50		
Display and communication			
Display	3.5 inches LCD display, support backlit display		
LCD language	English, Chinese, German, Dutch		
Keyboard	Integrated		
Communication interfaces:	RS485 (Standard), WiFi, Ethernet (Optional)		
Mechanical parameters			
Dimension (H x W x D mm)	480x610x204		
Weight (kg)	38		
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, 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: 2012		
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		



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