iMars BG Series Three Phase Grid-tied Solar Inverter

Description

iMars BG series three-phase grid-tied solar inverters adopt the latest technologies combination of T Topology three level topology and SVPWM, provide flexible system configuration and monitoring solutions for household, commercial and power plant systems It also provides flexible system configuration and monitoring solutions for household and commercial 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 98.6%.
- Wider voltage range, lower starting voltage, higher conversion efficiency.
- Designed with latest thermal simulation technology for longer service life.
- Wide input voltage range gives more possibilities for accepting different string configuration and different Topology 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's 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, GPRS Communication modes are optional for realizing multiple monitoring solutions via local or internet by PC, smart phone, etc.

Specification

S-BG20KTR	
Input (DC)	
Max. DC voltage	1000 V
Starting voltage /Min. operation voltage	300/280 V
Starting power	150 W
MPPT operating voltage range / Rated voltage	200-800 / 610 V
Rated power voltage range	450-800 V
Number of MPPT/ String Per MPPT	2/3
Max. DC Power	20800 W
Max. DC Current Per MPPT x Number of MPPT	25 x 2
DC switch	Integrated
Output (AC)	
Rated power	20000 W
Max. AC Current	32 A
Rated. AC voltage range/ Rated Grid frequency And Range	3/PE, 230/400V (320~460V); 3/PE, 220/380V (320~460V)
	50Hz (47~51.5Hz) / 60Hz (57~61.5Hz)
	According to VDE0126-1-1, VDE-AR-N4105, CQC, G59/3, C10/11, AS4777/3100, PEA
Power factor	-0.8~+0.8 (Adjustable)
THD	< 3% (At Rated Power)
AC connection	Three-phase (L1, L2, L3, PE) or (L1, L2, L3, N, PE)
System	
Cooling method	Smart Cooling method
Max. efficiency	98.40%
Euro-efficiency	98.00%
MPPT efficiency	99.9%
Degree of protection	IP65
Self-consumption (at night)	<0.5 W
Topology	Transformerless
Operating temperature range	-25℃~+60℃, (derate after 45℃)
Relative humidity	0~95%, no condensation
Protection	DC isolation monitoring, DC monitoring, grounding fault monitoring, grid monitoring, island protection, overvoltage and short circuit protection, etc.
Noise	< 50dB
Display and communication	
Display	3.5" LCD display, support backlit display
System language	English, Chinese, German, Dutch
Key	Integrated
Communication interfaces:	RS485 (Standard), WiFi, Ethernet (Optional)
Mechanical parameters	
Dimension (H x W x D)	660x525x250 mm.
Weight (kg)	52 kg
Installation	Wall mounting
Others	
DC terminal	BC03A, BC03B (PV-FT-CF-C-4-300-BU (-); PV-FT-CM-C-4-300-RD (+), Helios H4 4mm²)
Certifications	TUV, CE, VDE0126-1-1, VDE-AR-N4105, G59/3,C10/11, TF3.2.1, AS4777/3100,CQC EN61000-6-1:4, EN61000-11:12, IEC62109-1:2010, PEA,ZVRT,LVRT
Factory warranty (years)	5 (standard) / 10, 15, 20 (optional)

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