

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.

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%.
- 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-BG30KTR	
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	480-800 V
Number of MPPT/ String Per MPPT	2/3
Max. DC Power	31200 W
Max. DC Current Per MPPT x Number of MPPT	33 x 2
DC switch	Integrated
Output (AC)	
Rated power	30000 W
Max. AC Current	48 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	98.50%
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°C~+60°C, (derate after 45°C)
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 4mm ²)
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)