

iMars BG Series

Three Phase Grid-tied Solar Inverter

BG20KTR
BG25KTR
BG30KTR
BG33KTR
BG35KTR



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

	BG20KTR	BG25KTR	BG30KTR	BG33KTR	BG35KTR
Input (DC)					
Max. DC voltage (V)	1000				
Starting voltage /Min. operation voltage (V)	300/280				
Starting power (W)	150				
MPPT Operating Voltage Range (V) / Rated Voltage	280 - 800/610V				
Rated power voltage range (V)	450 - 800	480 - 800	480 - 800	500-800	550-800
Number of MPPT / String Per MPPT	2/3			2/4	
Max. DC Power (W)	20800	26000	31200	36000	38000
Max. DC Current (A) Per MPPT x Number Of MPPT	25x2	30x2	33x2	33x2	33x2
DC switch	Integrated				
Output (AC)					
Rated power (W)	20000	25000	30000	33000	35000
Max AC Current (A)	32	40	48	48	48
Rated AC Voltage And Range/ Rated Grid frequency And Range	3/PE, 230/400V (320~460V); 3/PE, 220/380V (320~460V).				3/N/PE,243/400V, (357~483V)
	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%	98.40%	98.50%	98.50%	98.50%
Euro-efficiency	98.00%	98.00%	98.00%	98.10%	98.10%
MPPT efficiency	99.9%				
Degree of protection	IP65				
Self-consumption (at night)	<0.5W				
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	3.5inches 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 mm)	660x525x250				
Weight (kg)	52				
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)				