

# iMars BG Series

## Three phase Grid-tied Solar inverters for US

- BG7KTR-US
- BG9KTR-US
- BG10KTR-US
- BG12KTR-US
- BG15KTR-US
- BG17KTR-US



### 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 98.3%.
  - 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 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.
- are optional for realizing multiple monitoring solutions via local or internet by PC, smart phone, etc.

## Specification

	BG7KTR-US	BG9KTR-US	BG10KTR-US
<b>Input (DC)</b>			
Max. DC voltage (V)	1000		
Starting Voltage (V)	200		
Min. Operation Voltage (V)	180		
MPPT Operating Voltage Range (V) / Rated Voltage (V)	180 - 800/610V		
Rated power voltage range (V)	220 - 800	240 - 800	
Number of MPPT / String Per MPPT	2/3		
Max. DC Power (W)	7300	9400	10500
Max. DC Current (A) Per MPPT x Number Of MPPT	19 x 2	21 x 2	23 x 2
DC switch	Integrated		
<b>Output (AC)</b>			
Rated power (W)	7000	9000	10000
Max AC Current (A)	20	25	28
Rated AC Voltage (V)	3/PE, 230(220/230V)		
Rated Grid frequency (Hz)	50 (47~ 51.5Hz)		
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)		
<b>System</b>			
Cooling method	Smart Cooling method		
Max efficiency	98.20%	98.30%	98.30%
Euro-efficiency	97.60%	97.80%	97.80%
MPPT efficiency	99.9%		
Protection	IP65		
Self-consumption (at night)	<0.5W		
Standard	VDE4105 VDE0126-1-1 EN50438 EN61000-6-3:2010 EN62109-1-1:2010		
Operating temperature range	-25℃~+60℃ (derate after 45℃)		
Relative humidity	<50dB		
Protection	DC isolation monitoring, DC monitoring, grounding fault monitoring, grid monitoring, island protection, overvoltage and short circuit protection, etc.		
<b>Display and communication</b>			
Display	3.5inches LCD display, support backlit display		
System language	English, Chinese, German, Dutch		
Communication interfaces:	RS485 (Standard), Ethernet, WiFi (Optional)		
<b>Mechanical parameters</b>			
Dimension (H x W x D mm)	610x480x204		
Weight (kg)	38		
Installation	Wall mounting		
<b>Others</b>			
DC terminal	BC03A, BC03B ( PV-FT-CF-C-4-300-BU (-); PV-FT-CM-C-4-300-RD (+), Helios H4 4mm <sup>2</sup> )		
Factory warranty (years)	5 (standard) / 10, 15, 20 (optional)		

## Specification

	BG12KTR-US	BG15KTR-US	BG17KTR-US
<b>Input (DC)</b>			
Max. DC voltage (V)	1000		
Starting Voltage (V)	200		
Min. Operation Voltage (V)	280		
MPPT Operating Voltage Range (V) / Rated Voltage (V)	280 - 800 / 610V		
Rated power voltage range (V)	320 - 800	320 - 800	320 - 800
Number of MPPT / String Per MPPT	2/4		
Max. DC Power (W)	12400	15400	17400
Max. DC Current (A) Per MPPT x Number Of MPPT	25 x 2	30 x 2	33 x 2
DC switch	Integrated		
<b>Output (AC)</b>			
Rated power (W)	12000	15000	17000
Max AC Current (A)	34	42	48
Rated AC Voltage	3/PE, 230(220/230V) / 127		
Rated Grid frequency (Hz)	50 (47~ 51.5Hz)		
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)		
<b>System</b>			
Cooling method	Smart Cooling method		
Max efficiency	98.30%	98.30%	98.40%
Euro-efficiency	97.80%	97.80%	98.00%
MPPT efficiency	99.9%		
Degree of protection	IP65		
Self-consumption (at night)	<1W		
Topology	Transformerless		
Operating temperature range	-25°C ~ +60°C (derate after 45°C)		
Relative humidity	<50dB		
Protection	DC isolation monitoring, DC monitoring, grounding fault monitoring, grid monitoring, island protection, overvoltage and short circuit protection, etc.		
<b>Display and communication</b>			
Display	3.5 inches LCD display, support backlit display		
System language	English, Chinese, German, Dutch		
Communication interfaces:	RS485 (Standard), Ethernet, WiFi (Optional)		
<b>Mechanical parameters</b>			
Dimension (H x W x D mm)	660x525x220		
Weight (kg)	52		
Installation	Wall mounting		
<b>Others</b>			
DC terminal	BC03A, BC03B ( PV-FT-CF-C-4-300-BU (-); PV-FT-CM-C-4-300-RD (+), Helios H4 4mm <sup>2</sup> )		
Factory warranty (years)	5 (standard) / 10, 15, 20 (optional)		