## iMars Series Grid-tied Solar Inverters

## invt





APPs for iSO and Android



Support up to 16 inverters



Web monitoring With INVT Cloud server

#### Description

iMars BG series three-phase grid-tied solar inverters adopt the latest technologies combination of T type 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 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'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 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





iMars PhoneExpert (for IOS) iMars PhoneExpert (for Android)

iMars - BG12~20KTR

# **Specification**

	BG12KTR	BG15KTR	BG17KTR	BG20KTR-M
Input (DC)				
Max. DC voltage (V)	1000			
Starting voltage /Min. operation voltage (V)	200/180 300/200			
Starting power (W)	150			
MPPT Operating Voltage Range (V) / Rated Voltage	180- 800/610V		280- 800/610V	
Rated power voltage range (V)	350 - 800	400 - 800	400 - 800	450-800
Number Of MPPT / String Per MPPT	2/2			
Max. DC Power (W)	12500	15600	17500	20800
Max. DC Current (A) Per MPPT x Number Of MPPT	19x2	21x2	23x2	25x2
DC switch	Integrated			
Output (AC)				
Rated power (W)	12000	15000	17000	20000
Max AC Current (A)	20	24	28	32
	3/PE, 230/400V, (320~460V), 3/PE,220/380V, (320~460V)			
Rated AC Voltage And Range/ Rated Grid frequency And Range	50Hz (47~51.5Hz) / 60Hz (57~61.5Hz)			
	According to VDE0126-1-1, VDE-AR-N4105, CQC, G59/3, C10/11, AS4777/3100.			
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	g method	
Max efficiency	98.20%	98.30%	98.30%	98.40%
Euro-efficiency	97.60%	97.80%	97.80%	98.00%
MPPT efficiency	99.90%			
Degree of protection	IP65			
Self-consumption (at night)	<0.5W			
Гороlоду	Transformerless			
Operating temperature range	-25°C∼+60°C (derate after 45°C)			
Relative humidity	0~95%, no condensation			
Protection Functions	DC isolation monitoring, DC monitoring, grounding fault monitoring, grid monitoring, island protection, overvoltage and short circuit protection, etc			
Noise		< 50d	В	
Display and communication				
Display		3.5 inches LCD display, s	upport backlit display	
System language	English, Chinese, German, Dutch			
Key	Integrated			
Communication interfaces:	RS485 (Standard),WiFi, Ethernet (Optional)			
Vechanical parameters				
Dimension (H x W x D mm)		610x480	x204	
Neight (kg)	38			
nstallation	Wall mounting			
Others				
DC terminal	BC03A, BC	03B ( PV-FT-CF-C-4-300-BU (-); PV	-FT-CM-C-4-300-RD (+), Helic	os H4 4mm²)
Certifications	VDE0126-1-1, VDE-AR-N4105, CQC, G59/3, C10/11, AS4777/3100. EN61000-6-1:4, EN61000-11:12, IEC62109-1:2010, PEA, LVRT			
Factory warranty (years)		5 (standard) / 10, 1		



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