



## *iMars B Series Three Phase Grid-tied Solar Inverter*

### Features

- Dual MPPTs work independently and allow unbalance input power. One string 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 type of PV modules.
- Bus capacitor adopts advanced film capacitor, 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.
- RS485, Ethernet, WIFI communication modes are optional for realizing multiple monitoring solutions via PC, mobile phones, internet etc. platforms.
- 12V 100mA auxiliary DC power interface is optional for system expansion.
- AC output power is adjustable during 1~100%.
- Reactive power control and power factor adjustable: 0.8 leading ~ 0.8 lagging.



ACT witness Lab certified by TÜV SÜD



**G83/G59 C10/11  
TF3.2.1 MEA PEA**



**iMars - BG17**

# Specification

|                                                 | BG6KTR                                                                                                                                                 | BG8KTR    | BG10KTR         | BG12KTR   | BG15KTR   | BG17KTR   |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------|-----------|-----------|-----------|
| Input (DC)                                      |                                                                                                                                                        |           |                 |           |           |           |
| Max. DC voltage (V)                             | 1000                                                                                                                                                   |           |                 |           |           |           |
| Starting voltage (V)                            | 200                                                                                                                                                    |           |                 |           |           |           |
| Min. operation voltage                          | 180                                                                                                                                                    |           |                 |           |           |           |
| MPPT operating voltage range (V) /Rated voltage | 180- 800/610V                                                                                                                                          |           |                 |           |           |           |
| Rated power voltage range (V)                   | 300 - 800                                                                                                                                              | 300 - 800 | 320 - 800       | 350 - 800 | 400 - 800 | 400 - 800 |
| Number of MPPT/ string per MPPT                 | 2/3 or 2/1 (Integrated Combiner Box)                                                                                                                   |           |                 |           |           |           |
| Max. DC power (W)                               | 6300                                                                                                                                                   | 8400      | 10400           | 12500     | 15600     | 17500     |
| Max. DC current (A) per MPPT x number of MPPT   | 11x2                                                                                                                                                   | 14x2      | 19x2            | 19x2      | 21x2      | 23x2      |
| DC switch                                       | Optional                                                                                                                                               |           |                 |           |           |           |
| Output (AC)                                     |                                                                                                                                                        |           |                 |           |           |           |
| Rated power (W)                                 | 6000                                                                                                                                                   | 8000      | 10000           | 12000     | 15000     | 17000     |
| Max. AC current (A)                             | 10                                                                                                                                                     | 13        | 16              | 20        | 24        | 28        |
| Rated AC voltage and range                      | 3/N/PE,230/400V, (320~460V)                                                                                                                            |           |                 |           |           |           |
|                                                 | 3/N/PE,220/380V, (320~460V)                                                                                                                            |           |                 |           |           |           |
| Rated Grid frequency and range                  | According to VDE0126-1-1,VDE-AR-N4105,CQC,G59/2,C10/11, ,AS4777/3100.                                                                                  |           |                 |           |           |           |
|                                                 | 50Hz(47~51.5Hz) / 60Hz(57~61.5Hz)                                                                                                                      |           |                 |           |           |           |
| Power factor                                    | According to VDE0126-1-1,VDE-AR-N4105,CQC,G59/2,C10/11, ,AS4777/3100                                                                                   |           |                 |           |           |           |
|                                                 | -0.9~+0.9 (Adjustable)                                                                                                                                 |           |                 |           |           |           |
| THD                                             | < 3% (at rated power)                                                                                                                                  |           |                 |           |           |           |
| AC connection                                   | Three-phase (L1, L2, L3, N, PE)                                                                                                                        |           |                 |           |           |           |
| System                                          |                                                                                                                                                        |           |                 |           |           |           |
| Cooling                                         | Smart cooling                                                                                                                                          |           |                 |           |           |           |
| Max.efficiency                                  | 97.50%                                                                                                                                                 | 97.60%    | 98.20%          | 98.20%    | 98.30%    | 98.30%    |
| Euro-efficiency                                 | 97.00%                                                                                                                                                 | 97.00%    | 97.60%          | 97.60%    | 97.80%    | 97.80%    |
| MPPT efficiency                                 | 99.9%                                                                                                                                                  |           |                 |           |           |           |
| Protection degree                               | IP65                                                                                                                                                   |           |                 |           |           |           |
| Consumption at night                            | <0.5W                                                                                                                                                  |           |                 |           |           |           |
| Isolation mode                                  | Transformerless                                                                                                                                        |           |                 |           |           |           |
| Operating temperature                           | -25℃ ~+60℃ , derate after 45℃ (-77°F ~+140°F, derate after 113°F)                                                                                      |           |                 |           |           |           |
| 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                                           | < 50dB                                                                                                                                                 |           |                 |           |           |           |
| Display and Communication                       |                                                                                                                                                        |           |                 |           |           |           |
| Display                                         | 3.5inches LCD display, support backlit display                                                                                                         |           |                 |           |           |           |
| System language                                 | English, Chinese                                                                                                                                       |           |                 |           |           |           |
| Key                                             | Integrated                                                                                                                                             |           |                 |           |           |           |
| Communication mode                              | RS485(Standard); WiFi, Ethernet(Optional)                                                                                                              |           |                 |           |           |           |
| Mechanical Parameters                           |                                                                                                                                                        |           |                 |           |           |           |
| Dimension (H x W x D mm)                        | 480x610x204                                                                                                                                            |           |                 |           |           |           |
| Weight (kg)                                     | <30Kg (66pound)                                                                                                                                        |           | <35Kg (77pound) |           |           |           |
| Installation                                    | Wall mounting                                                                                                                                          |           |                 |           |           |           |
| Others                                          |                                                                                                                                                        |           |                 |           |           |           |
| DC terminal                                     | SUNCLIX water-proof terminal                                                                                                                           |           |                 |           |           |           |
| Certifications                                  | VDE0126-1-1,VDE-AR-N4105,CQC,G59/2,C10/11,AS4777/3100.                                                                                                 |           |                 |           |           |           |
|                                                 | EN61000-6-1:4,EN61000-11:12;IEC62109-1:2010                                                                                                            |           |                 |           |           |           |



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