



# GEC 5-9.6kW Series

Split-phase AC Retrofit

GEC5.0-1U-US10

GEC6.0-1U-US10

GEC7.0-1U-US10

GEC7.6-1U-US10

GEC8.6-1U-US10

GEC9.6-1U-US10

## Tailored for US Market Needs

- Upgrading a grid-tied system to an energy storage system
- 120/240 VAC on/off-grid output
- AFCI on battery side

## Secure Sustainable Power Supply

- Micro-grid application
- Full backup capacity up to 9.6 kW
- Compatible with diesel generators

Discover this unique split-phase AC Retrofit inverter that is compatible with high voltage (80-495 V) batteries and has a power capacity ranging from 5 kW to 9.6 kW. Homeowners can simply upgrade their existing PV system for maximizing generation and self-consumption in comfort and security. Intelligent mechanisms are timely activated to ensure power supply to critical loads when most needed. This inverter also supports micro-grid applications, ensuring the grid-tied inverter stays connected in case of grid outage. AFCI (Arc-fault current interrupter) for battery side ensures battery safety, offering freedom and security all in one.





# GEC 5-9.6kW

## Split-phase AC Retrofit

| Technical Data                                     | GEC5.0-1U-US10                                  | GEC6.0-1U-US10 | GEC7.0-1U-US10 | GEC7.6-1U-US10 | GEC8.6-1U-US10 | GEC9.6-1U-US10 |
|--|---|----------------|----------------|----------------|----------------|----------------|
| <b>Battery Input Data</b>                          |   |                |                |                |                |                |
| Battery Type                                       | Li-Ion  |                |                |                |                |                |
| Nominal Battery Voltage (V)                        | 300   |                |                |                |                |                |
| Battery Voltage Range (V)*1                        | 80~495  |                |                |                |                |                |
| Max. Continuous Charging Current (A)               | 50  |                |                |                |                |                |
| Max. Continuous Discharging Current (A)            | 50  |                |                |                |                |                |
| Max. Charge Power (W)                              | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| Max. Discharge Power (W)                           | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| <b>AC Output Data (On-grid)</b>                    |   |                |                |                |                |                |
| Nominal Apparent Power Output to Utility Grid (VA) | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| Max. Apparent Power Output to Utility Grid (VA)    | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| Max. Apparent Power from Utility Grid (VA)         | 6000  | 7200           | 8400           | 9120           | 9600           | 9600           |
| Nominal Output Voltage (V)                         | 120/240   |                |                |                |                |                |
| Nominal AC Grid Frequency (Hz)                     | 60  |                |                |                |                |                |
| Max. AC Current Output to Utility Grid (A)         | 20.8  | 25             | 29.2           | 31.7           | 35.8           | 40             |
| Max. AC Current From Utility Grid (A)              | 25  | 30             | 35             | 38             | 40             | 40             |
| Output Power Factor                                | ~1 (Adjustable from 0.8 leading to 0.8 lagging) |                |                |                |                |                |
| Max. Total Harmonic Distortion                     | <3%   |                |                |                |                |                |
| <b>AC Output Data (Back-up)</b>                    |   |                |                |                |                |                |
| Back-up Nominal Apparent Power (VA)                | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| Max. Output Apparent Power (VA)                    | 5000  | 6000           | 7000           | 7600           | 8600           | 9600           |
| Peak Output Apparent Power (VA)*2                  | 6000, 60sec                                     | 7200, 60sec    | 8400, 60sec    | 9120, 60sec    | 10320, 60sec   | 11520, 60sec   |
| Max. Output Current (A)                            | 20.8  | 25             | 29.2           | 31.7           | 35.8           | 40             |
| Nominal Output Voltage (V)                         | 120/240   |                |                |                |                |                |
| Nominal Output Frequency (Hz)                      | 60  |                |                |                |                |                |
| Output THDv (@Linear Load)                         | <3%   |                |                |                |                |                |
| <b>Efficiency</b>                                  |   |                |                |                |                |                |
| Max. Battery to Load Efficiency                    | 96.6%   |                |                |                |                |                |
| <b>Protection</b>                                  |   |                |                |                |                |                |
| Anti-islanding Protection                          | Integrated                                      |                |                |                |                |                |
| DC Reverse Polarity Protection                     | Integrated                                      |                |                |                |                |                |
| AC Overcurrent Protection                          | Integrated                                      |                |                |                |                |                |
| AC Short Circuit Protection                        | Integrated                                      |                |                |                |                |                |
| AC Overvoltage Protection                          | Integrated                                      |                |                |                |                |                |
| AC Surge Arrester                                  | Type III  |                |                |                |                |                |
| <b>General Data</b>                                |   |                |                |                |                |                |
| Operating Temperature Range (°F)                   | -31°F~140°F (>113°F derating)                   |                |                |                |                |                |
| Relative Humidity                                  | 0~95%   |                |                |                |                |                |
| Max. Operating Altitude (ft)                       | 13124 ft (>9843 ft derating)                    |                |                |                |                |                |
| Cooling Method                                     | Smart Fan Cooling                               |                |                |                |                |                |
| User Interface                                     | WiFi+APP, LED                                   |                |                |                |                |                |
| Communication with BMS                             | RS485; CAN                                      |                |                |                |                |                |
| Communication with Meter                           | RS485   |                |                |                |                |                |
| Communication with Portal                          | Wi-Fi; 4G*4 (Optional)                          |                |                |                |                |                |
| Weight (lb)  | 62.85   |                |                | 70.55          |                |                |
| Dimension (W × H × D in)                           | 16.3 × 33.1 × 6.9                               |                |                |                |                |                |
| Topology   | Transformerless                                 |                |                |                |                |                |
| Night Power Consumption (W)*3                      | <20   |                |                |                |                |                |
| DC Connector                                       | MC32*1.5  |                |                |                |                |                |
| AC Connector                                       | MC32*1.5  |                |                |                |                |                |
| Protective Class                                   | Type 4X   |                |                |                |                |                |
| Storage Environments                               | -40°F~+185°F, 0-95%RH, 13124 ft                 |                |                |                |                |                |
| Mounting Method                                    | Wall Bracket                                    |                |                |                |                |                |

\*1: Battery discharge/charge power limited by voltage.

\*2: Can be reached only if battery power is enough.

\*3: No Back-up Output.

\*4: Estimated launch date: 31/12/2021.

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