



# 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



Maximum Safety (PV & Battery AFCI)



Full Backup Capacity up to 9.6kW



Diesel Generator Connection



Rapid & Easy Installation



120/240 Vac Output



Micro-grid application

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 both PV and battery and rapid shutdown likewise ensure the safety of the whole PV system, offering freedom and security all in one. Additionally, this inverter can connect to a diesel generator and is equipped with an external auto-transformer for 120 Vac output.



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## 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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