

# GENERAC ECOGEN™ BACK UP POWER FOR OFF-GRID APPLICATIONS 15 kW



# GENERAC ECOGEN™

# Backup Power for Alternative Energy Systems

Whether the off-grid lifestyle is a choice or a necessity, you are responsible for producing the energy you consume—even when there's no sun or wind. Ensure you never have dead batteries with the Generac EcoGen—the only automatic standby generator designed and with a warranty specifically for off-grid use with an alternative energy system.

### How Does the Generac EcoGen Work?

In an alternative energy system, the generator is an important source of backup power when other resources are insufficient for the demand.

- (1) Solar cells and/or wind turbines generate DC electric current.
- 2 The DC current enters the inverter charger, and then the battery bank.
- The inverter takes DC power from the battery bank, converts it to AC electricity, and sends the AC power to your home's electrical panel.
- If the battery level drops to a preset point, perhaps because there is no solar or wind power available, the inverter automatically signals the Generac EcoGen generator to start up.
- The Generac EcoGen delivers AC power to the inverter, which simultaneously sends AC power to your home's electric panel and sends DC power to the battery bank until it is charged to an acceptable level.



# Patented G-Flex™ Technology

Exceptional Fuel Efficiency. Uncommonly Quiet Operation. Cleanest Power.

Traditional home standby generators have to run at a constant speed to produce usable electricity. Patented G-Flex technology allows the Generac EcoGen home standby generator to vary its speed based upon electrical demand. It will run slower—and quieter—when you use less electricity. And during its weekly exercise, you'll hear only about as much sound as if you were riding in a luxury car. The Generac EcoGen also consumes less fuel when electricity demand is light, saving you money. And G-Flex technology delivers electricity with less than 2.0% total harmonic distortion (THD)—lower than IEEE standards for utility power—to properly power modern electronics and sensitive appliances.

**Skewed Stator** 

# Designed Specifically for Off-Grid Use

### **Unprecedented Service Intervals**

The Generac EcoGen's exclusive premium oil recovery and circulation system virtually halts oil degradation, and allows for 500 hours between oil changes—five times the industry standard.

### **Two-Wire Start**

Factory-equipped to easily connect to the inverter control wires so that the inverter can automatically start and stop the generator in order to charge the system batteries as necessary.

### **Limited Warranty**

Unlike conventional home standby generators used in an alternative energy system, the Generac EcoGen is backed by a 3-year/2000 hour limited warranty.

# Produces a smooth output wave form for compatibility with sensitive electronics.

### **Evolution™ Controller**

The next generation of intuitive controllers, the Evolution controller features a multilingual, two-line LCD text display with color-coded backlit buttons.

# Automatic Voltage Regulator (AVR)

The brains behind the G-Flex technology, the AVR monitors electrical demand and reduces engine speed accordingly. It also keeps tabs on alternator output frequency at lower engine speeds. Then it electronically manipulates alternator output to achieve 60 Hz electrical power. In doing so, it produces exceptionally clean power—less than 2.0% THD.

### **Extended Operation Oil Reservoir**

Provides additional oil capacity for extended oil life with fewer required maintenance intervals.

### **Specialized Alternator**

The rotor has three windings instead of the normal two. They are electronically controlled by the AVR to ensure 60 Hz output, even at a lower speeds.

### Resonator

The unique resonator is specifically designed to improve sound quality and minimize overall sound levels. The result is a lower tone that, when combined with the generator's quieter operation, is more pleasing to the ear. During its weekly exercise, the Generac EcoGen is about as quiet as riding in a luxury automobile.







### **FEATURES**



### **OHVI® ENGINE**

The Generac OHVI® engine, specifically designed for generator use, provides the reliability to power through the most severe outages. Engineered and built in the USA.



### **EVOLUTION™ CONTROLLER**

The next generation of intuitive controllers, the Evolution controller features a multilingual, two-line LCD text display with color-coded backlit buttons.



### **CONVENIENT INSTALLATION**

Can be installed only 18" from the home, if located away from doors, windows, and fresh air intakes, unless otherwise directed by local codes.

\* Total harmonic distortion (THD) less than 2.0%—lower than both IEEE standards for utility power and published numbers for competitive aircooled home standby generators.

† Built in the USA using domestic and foreign parts.



### **RHINOCOAT**

Our durable RhinoCoat powder-coat finish helps make sturdy aluminum enclosures perfect for all weather conditions. Enclosure is able to withstand 150 mph winds.



# FUEL OPTIONS WITH TOOL-LESS CONVERSION

The Generac EcoGen runs on LP fuel or natural gas, and easily converts during installation without the need for tools.

GENERATOR	Model 6103 (15 kW)
Rated Maximum Continuous Power Capacity (NG/LP)	15,000 W / 15,000 W
Rated Voltage	240 V
Rated Maximum Continuous Load Current - 240 Volts	62.5 / 62.5
Main Line Circuit Breaker	65 Amps
Phase	1
Number of Sliprings	3
Rated AC Frequency	60Hz
Power Factor	1
Battery Requirement (not included)	Group 26R 12 Volts and 525 Cold-cranking Amperes Minimum
Unit Weight (Pounds / Kilos)	536 / 243.1
Dimensions (L x W x H) Inches [mm]	48 x 25 x 29 [1218 x 638 x 732]
Sound output in dB(A) at 23 ft. with generator operating at normal load	63

ENGINE				
Type of Engine				Generac OHVI V-twin
Number of Cylinders	3			2
Displacement				999cc
Cylinder Block				Aluminum w/Cast Iron Sleeves
Valve Arrangement				Overhead Valve
Ignition System				Solid-state with Magneto
Governor System				Electronic
Compression Ratio				9.5:1
Starter				12 Vdc
Engine Oil Capacity Including Filter (quarts / liters)			1.9 Qt / 1.8 L	
Oil Reservoir Capacity (quarts / liters)			3.75 Qt / 3.55 L	
Engine Operating R	PM			2700-3600
Fuel Consumption	1/2 load Full Load	Natural Gas - ft³/hr (m³hr) 134 (3.79) 281 (7.96)	47.6 (1.32) [-	opane - ft³/hr [4.99] (gal/hr) [7] [10.86] (E1/hr)

Required fuel pressure to generator fuel inlet at all load ranges - 10 to 12 inches of water column for liquid propane gas, 5-7 inches water column for natural gas.

CONTROLS	
2-Line Plain Text LCD Display	Simple user interface for ease of operation
2-Wire start	Allows for easy inverter control correction
Mode Switch - Auto	Puts unit in standby mode, waiting for inverter start call.
- Off	Stops unit. Power is removed. Control and charger still operate.
- Manual/Test (start)	Start with starter control, unit stays on.
Starter Lock-out	Starter cannot re-engage until 5 sec. after engine has stopped.
2.5 Amp Smart Battery Charger	Standard
Automatic Voltage Regulator with Overvoltage Protection	Standard
Automatic Low Oil Pressure Shutdown	Standard
Overspeed Shutdown	Standard, 72Hz
High Temperature Shutdown	Standard
Overcrank Protection	Standard
Safety Fused	Standard

<sup>\*</sup> Rating definitions - Standby: Applicable for supplying emergency power for the duration of the charging period. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). \* Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet above sea level; and also will decrease about 1 percent for each 12° C (10° F) above 15.5° C (60°F). Not for sale in California.

### Nationwide Dealer Service Network

Generac's commitment to service includes scheduled maintenance programs, warranty assistance and emergency service to ensure that Generac customers are never left powerless. The largest nationwide dealer network has factory-trained technicians on staff and maintains large inventories of Generac parts, components and accessories. Find a dealer near you at generac.com.



