

**GENERAC®**

**ECOGEN SERIES**



**Back Up Power For Off-Grid Applications**

# The EcoGen 6 kW

## The energy efficient answer to your renewable energy needs.

Whether your off-grid location is a choice or a necessity, power is important to you. You are responsible for the production of the energy you consume, and even when there's no sun or wind, your batteries continue to deliver electricity. Unless you have a backup power system in place, eventually your battery bank drains and you are left powerless. For some this may not be cause for alarm, but even for off-grid consumers whose needs are fairly simple, this is a dilemma that can become critical. How long can you go without basics such as heat and cooling, water, lights, and refrigeration?

Until now, alternative energy system backup options have typically been expensive, inadequately sized solutions adapted from other applications. Generac Power Systems, the pioneer in standby power and manufacturer of the #1 selling home standby generator, has changed all that.

Knowing an affordable, reliable, low-emission, off-grid backup power solution would fulfill a need in the marketplace, Generac engineered the EcoGen 6 kW to eliminate virtually all of the issues previously associated with renewable energy backup power options. Issues such as high fuel consumption, noise, and short product life have been eliminated by the only off-grid automatic standby generator to incorporate over 50 years of power generation expertise.

- Built specifically for this application, it is the first automatic standby generator to be warranted for off-grid use when used in an alternative energy system.
- Engineered to easily integrate into the existing inverter and battery storage system.
- Runs on a more environmentally friendly, energy-efficient alternative – propane gas – that is already stored and available at many off-grid locations.
- Features Generac's own V-Twin OHVI® industrial engine, the only engine developed specifically for generator use. The low speed makes it the quietest in the industry, with noise and vibration levels drastically less than comparable solutions.
- Simplified maintenance with unprecedented 500 hour maintenance intervals saves time and money.
- Full 6 kW output at 120V

### Suggested Off-Grid Applications:

Homes and businesses

Telecommunications and railroads

Farms & ranches

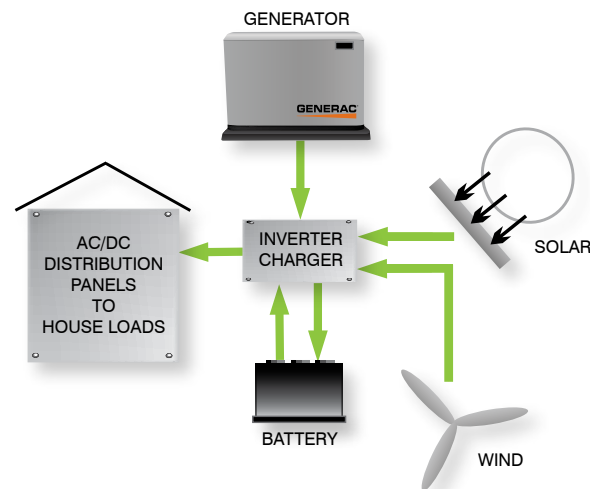
National parks and other remote state and county sites

Remote lodging and recreation

### How Does It Work?

In an off-grid solution, the generator is an important source of backup power when other resources are insufficient for the demand, improving overall system reliability.

1. Sun (solar cells) and/or wind (turbines) generate DC current.
2. This is fed to the inverter charger and then on to the battery bank.
3. The inverter takes DC power from the battery bank, converts it to AC and then sends the current to the AC electrical panel.
4. If there is no solar or wind gain and the battery bank level drops below a preset threshold, the inverter automatically signals the generator to start up.
5. The generator feeds AC power to the inverter, which in turn sends power to the electric panel and recharges the battery bank to an acceptable level.



Setup options will vary depending on application.

# The **outside** looks just like our #1 selling automatic home standby generator. The **inside** is unlike any standby generator on the market.

## EXTENDED RUN CAPABILITY & LONG LIFE

Features an exclusive premium oil recovery and circulation system that virtually halts oil degradation. Maintenance intervals are extended by an unprecedented five times the industry standard with 500 hours between oil changes.

## PROPANE FUELED

Clean burning propane fuel increases efficiency, contributes to longer engine life, and produces significantly less carbon monoxide than gasoline fueled engines.

## WEATHER PROTECTIVE STEEL ENCLOSURE

The steel enclosure features our RhinoCoat™ finish system, a process that evenly joins paint particles to every part of the metal surface. Components are baked for more consistent coverage to all surfaces, providing exceptional protection from the elements on not only the enclosure, but also the base frame.

## THE GOOD HOUSEKEEPING SEAL

The limited warranty reflected by the Good Housekeeping Seal means that if a product bearing the Seal is defective within the first two years of purchase, Good Housekeeping will replace the product or refund the purchase price.



## NEXUS™ DIGITAL CONTROLLER

The state-of-the-art Nexus Digital Controller features an LCD display with status indicators, monitors generator performance, and records any issues for easy troubleshooting. It also includes an integrated smart charging system that only charges the battery when necessary. Three position switch allows for automatic, off and manual functions.

## CAPABLE OF 120V OR 240V

Factory wired for a full 6 kW at 120VAC, with the capability to be reconfigured for a full 6 kW output at 240VAC to accommodate larger 240V inverter systems or two systems paired together.

## TWO-WIRE START

Factory equipped to easily connect to the inverter control wires, it enables the inverter to automatically start and stop the generator in order to charge the system batteries as necessary.

## ULTRA QUIET, LOW RPMS

Only 52 dB(A) under normal load!  
Vertically mounted, belt-driven engine drives at 2600 RPMs, resulting in a longer life and drastically quieter operation than other systems.

## WARRANTY

Backed by an unprecedented 3 year/2000 hour limited warranty when used off-grid in an alternative energy system.

## Generac OHVI® Engine

### THE POWER BEHIND THE #1 HOME STANDBY GENERATOR

Generac's OHVI engine is the only engine designed specifically for generator use. Why is this important? Generators are often required to run for hours at a time, day after day. Generac's OHVI engine utilizes the same type of pressurized oil lubrication used to give automobile engines long and trouble free lives. This means a significantly longer life than many competitive engines - an unprecedented three to four times longer. That's the reliability you need when downtime is not an option.



# EcoGen 6 kW Specifications

GENERATOR		Model 005818-0 (6 kW)
Rated Maximum Continuous Power Capacity (LP)		6 kW*
Rated Voltage		120 (240 capable w/kit – Model 6016-0)
Rated Maximum Continuous Load Current – 240 Volts		50 Amps (25@240V)
Main Line Circuit Breaker		50 Amps (25 Amps after conversion)
Phase		1
Number of Rotor Poles		2
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)		387/175.5
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		52
ENGINE		
Type of Engine		GENERAC OHVI
Number of Cylinders		2
Displacement		530cc
Cylinder Block		Aluminum w/Cast Iron Sleeves
Valve Arrangement		Overhead Valve
Ignition System		Solid-state w/Magneto
Governor System		Electronic
Compression Ratio		9.5:1
Starter		12 Vdc
Engine Oil Capacity Including Filter (quarts/liters)		1.5Q/1.4L
Oil Reservoir Capacity (quarts/liters)		4.2Q / 4.0L
Engine Operating RPM		2,600
Fuel Consumption Liquid Propane	ft <sup>3</sup> /hr (gal/hr)	
	½ Load	30.8/0.85
	Full Load	48.2/1.32
Required fuel pressure to generator fuel inlet at all load ranges - 11 to 14 inches of water column for liquid propane gas.		
CONTROLS		
2-Line Plain Text LCD Display		Simple user interface for ease of operation
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 w/Overvoltage Protection		Standard
Automatic Low Oil Pressure Shutdown		Standard
Overspeed Shutdown		Standard, 72Hz
High Temperature Shutdown		Standard
Overcrank Protection		Standard
Safety Fuse		Standard

\* 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.



## Power Since 1959

Since the original portable that started it all in 1959, Generac has continued to engineer advances in generator power for more than fifty years. Generac's product range now includes power solutions from RV, portable, and automatic home standby generators to backup systems for commercial and industrial applications, all backed by an extensive nationwide service network of certified dealers. Because of our ongoing commitment to quality and innovation, Generac is the name home and business owners have come to trust.

## Sustainability

Generac is committed to developing a long term vision that promotes environmentally responsible products, processes, and partnerships. We offer product options that allow our customers to shrink their ecological footprint when generator energy use is required. Manufacturing processes are implemented with the goal of minimizing environmental impact by reducing the amount of materials used and emissions produced. Partnerships are sought with organizations and stakeholders to further the development of sustainable technologies. By adhering to these principles, we strive to be a positive contributor of sustainable growth in our industry.



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