# **How To Choose A Generator**

There are a wide variety of portable generators available - the primary differences are in watt size, engine size, and price. Basically, portable generators are made for three uses: Recreational, Emergency, and Professional.

By taking the time to evaluate how many watts you need, you'll be able to find the right generator you your needs. You can refer to our Wattage Calculator for a general overview of basic watt usage. The amount of power your portable generator can produce is generally expressed in watts.

Although there are many areas where you can save money on generators, such as opting out of special features, the one area where you should never compromise is the power output of the generator. Less wattage certainly means less cost, but if your generator can't run all of your basic appliances, it's not going to be able to do the job you're buying it for.

To determine the generator wattage you will need, add up the wattage requirements of the appliances and tools you need to run, and then add a safety margin so your generator never runs steadily at more than 50 percent of capacity.

#### **Recreational Generators:**

These are really popular for both camping and tail-gating, and both the prices and noise levels have dropped significantly in the past few years. Most people look at generators in the 500 - 6000 watt range for this use.

### **Emergency Generators:**

While recreational generators are perfect for camping or tail-gating, they may not be powerful enough to serve as a back-up generator in a power outage. Depending on your wattage needs, you can select a generator in the 1,000 - 15,000 watt range.

The emergency generators feature more powerful engines and larger gas tanks to help create power for important home appliances like refrigerators, lights, and home appliances. Because of their larger size, they can run for hours without interruption. They are designed to be both durable and affordable. Depending on your power needs, we have a wide variety of portable generators for emergency use.

### **Professional Generators:**

These generators feature much more powerful engines and larger gas tanks - and are designed to run day in and day out servicing many users and a variety of needs. They are certainly larger and more expensive; however, they are built for the demands of the job site. Again, depending on your power needs, we have a wide variety of portable generators for job-site and professional use.

## **Fuel Types:**

For many people, the first consideration when shopping for a portable generator is what type of fuel it requires. Generators can be powered by gasoline, diesel, or propane. Some models allow you to switch between fuel types.

# Gasoline

For most homeowners who need a generator for emergency or backup use, gasoline is the fuel of choice. Gas generators tend to be more cheaply priced than other models, and most of the time fuel is readily available. However, gasoline-powered generators need to be refueled regularly, no matter what the weather is like, and gasoline may be difficult to acquire in case of a power outage or natural disaster.

Gas-powered generators require more upkeep and care than other fuel models. Gasoline is slightly more dangerous to store than diesel, as it has a lower flash point temperature. Gasoline also has a relatively low shelf life, and most blends begin breaking down or absorbing moisture within a month. Even gasoline that is several years old is viable, but it may contain elements that will break down or wear engine parts. If you plan to use your generator very infrequently, consider adding a fuel stabilizer or choosing a different type of fuel.

Also, be aware that major power outages also affect local gas stations, so it may be difficult to refuel. There could also be fuel shortages due to high demand in your area.

Gasoline is a more efficient fuel than propane or natural gas, but is less efficient than diesel, offering 125,000 BTUs per gallon (enough to heat an average sized room for 5 to 10 hours).

## Diesel

Diesel generators\_require less upkeep and are more efficient than other fuel types. They are typically preferred for their efficiency and low maintenance.

Most diesel generators provide more horsepower per gallon of fuel than comparable gas-powered generators. They can also run for years without maintenance.

Although diesel generators have a reputation for being more durable than gas, if they are not run regularly they may be more prone to breaking down.

- Diesel generators are more expensive than comparable gas models.
- Diesel is generally safer to store than gasoline, as it requires a higher temperature to ignite.
- Diesel has a longer shelf life than gasoline, lasting a few months before beginning to degrade. Like
  gasoline, diesel will burn even after years of storage, but it may degrade the workings of your
  engine.

Diesel is the most efficient of generator fuels, offering 138,700 BTUs per gallon of fuel (enough to heat an average sized room for 6 to 12 hours).

## Propane

Another option for fueling your generator is propane. Sometimes also referred to as liquid petroleum gas (LPG), propane requires a tank separate from the generator itself. These tanks can be the same kind used for fueling heaters and grills, or you can rely on a larger, stationary tank that must be periodically refilled by a service truck.

Unlike gasoline and diesel, propane will not degrade in storage, so it is a viable option for people who rarely or sporadically use their generator. However, propane is less efficient than both gasoline and diesel, offering 91,300 BTUs per gallon. Propane generators are very popular for recreational use like camping, RV, and even emergency backup.

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