



Generic Inverter Issues

What does an inverter do?

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What does an inverter do?

Appliances run on either Direct Current (DC) or Alternating Current (AC). Alternating Current (AC) is the electricity the local power utilities supply us to run our homes and offices. Direct Current (DC) is a uni-directional electricity, which unlike Alternating Current, can be stored in batteries.

Inverters are electronic devices that convert DC power from your batteries into a form that mimics conventional grid power (mimics AC). Most inverter models produce a modified square wave. This waveform allow you to run many of the typical loads you need such as fluorescent lights, TVs, stereos, vacuums and power tools. There are a few limitations to modified sine wave for some types of electronic controls such as dimmer switches, sensitive electronics like laser printers and photocopiers, and some small rechargeable devices.

What's the difference between modified square and modified Sine Wave outputs?

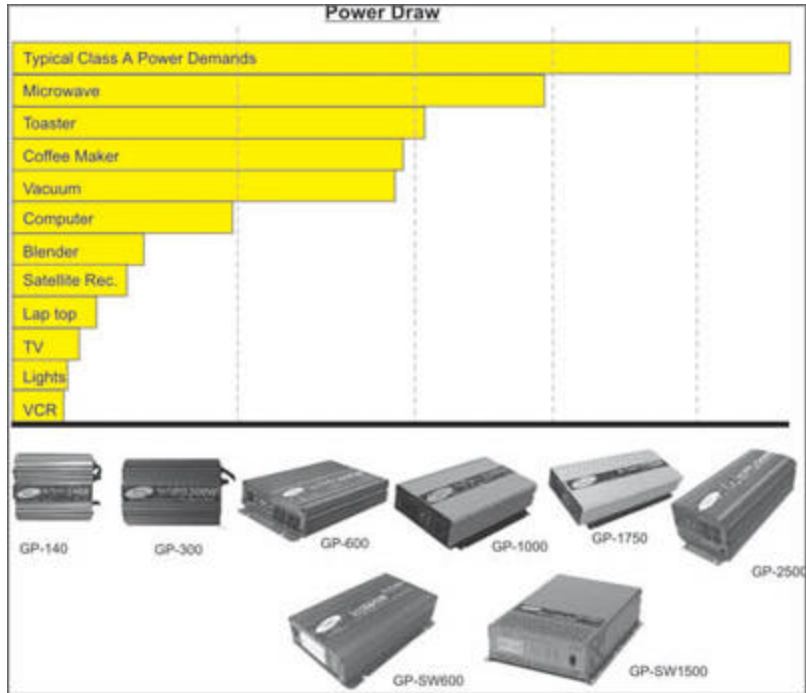
Modified square waves create alternating current (AC) in 4 steps per cycle. This output will run 90% of appliances; however, exceptions include some laser printers and cordless battery chargers. In addition, some equipment will hum or experience interference from this inverter power.

Sine wave, in comparison, creates AC in 50+ steps to closely approximate utility power. Such inverters will run any load with little or no hum or interference. All manufacturers of AC appliances, computers, and televisions, for example, are designed to be powered by a pure sine wave. Until recently, the cost of the pure sine wave inverters has been considerably higher and many people decided to compromise performance for price. The good news today is that new developments in pure sine wave inverters have lowered the cost enough that we no longer have to sacrifice the performance of our appliances.

How do I know which Go Power! Inverter is right for me?

When selecting an inverter, choose a size that can power the appliance you plan to use.

Inverters are rated according to the continuous power that they can produce; however, they are also designed to deliver large amounts of current for short periods of time - a feature called surge capacity.



How do I avoid interference on my radio / TV?

Some appliances like microwaves may be noisier, and stereo equipment and TVs may have a slight hum or buzz, when run off an inverter. Fringe areas make it even more likely that you will experience interference on your radio or TV.

This is because your appliance is being run on a modified sine wave inverter; manufacturers of AC-powered appliances, computers and televisions are designed to be powered by a pure sine wave. Check out our [Go Power! Sine Wave Inverters](#).

Can I use a modified sine wave with sensitive medical equipment?

The answer to this is not a modified sine wave; for medical equipment that you need to depend on, choose a pure sine wave such as our GP SW -1500. This inverter will provide the best output you can expect from an inverter, allowing you to travel wherever you want and run your equipment off the batteries.

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