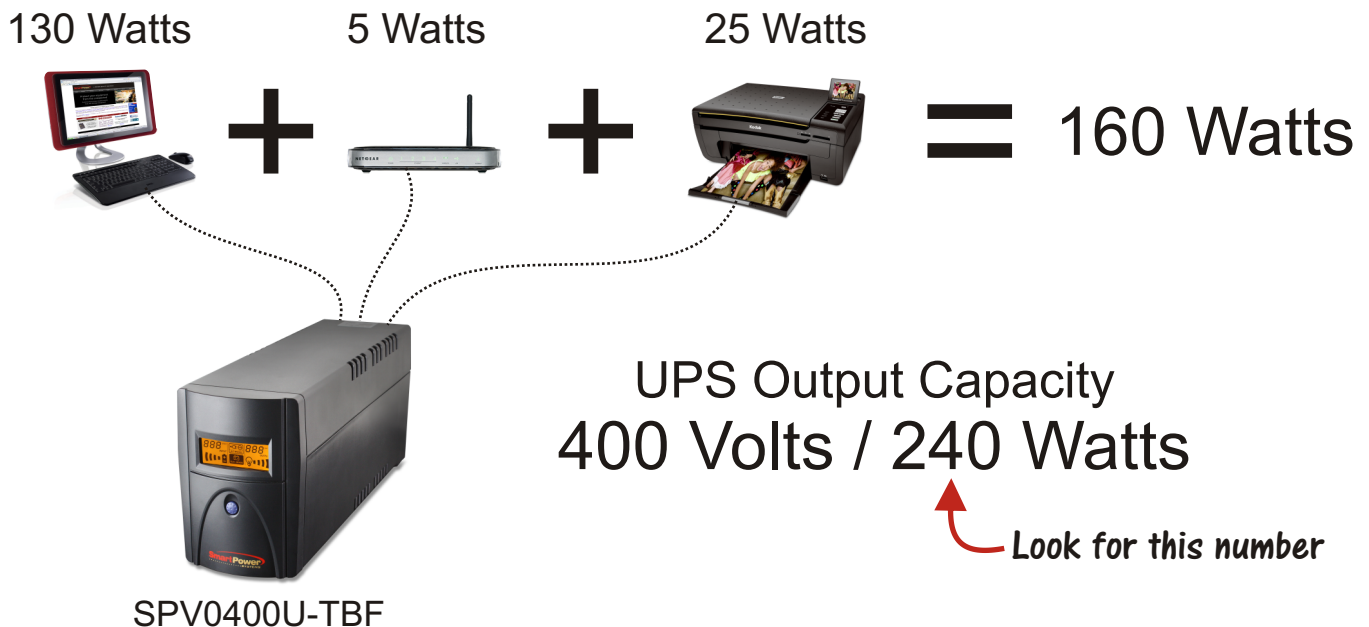


Do-It-Yourself UPS Sizing

Selecting the correct size ups system is not as hard as you might think. However, it is vitally important because an undersized ups will not function when the power goes out. Here's how:

UPS systems are rated by their Volt Amp (VA) and Watt output capability. For example, a UPS may be rated at 400VA / 240 Watts. The difference in VA and Watts is due to an electrical property called a power factor, but if you size the ups using Watts, you don't need to worry about the power factor. The Watt rating of a UPS system is simply a measure of how much equipment you can plug into it.

The first thing to determine is the power requirement of your equipment (load). Most pieces of equipment have a tag on the back that will tell the watts or amps used, and the voltage. Create a list of what you intend to plug into the UPS system along with the Watt requirement. The total of this list is your Watt requirement. Another factor to consider is whether you expect to be adding equipment in the future, or if your equipment growth will be pretty static. Finally, always make sure you have at least 30 % extra capacity to ensure you battery backup will function when you need it.



If you find Amps, convert to Watts

$$1.3 \text{ Amps} \times 120 \text{ Volts} = 160 \text{ Watts}$$

or 240 Volts

If you get a UPS system that has a Watt rating that is too small, it will not provide the battery backup that you are counting on, or it may not work at all. Determining the size requirement for a ups is a pretty straightforward process. If you need more help configuring a ups system, go to <http://www.smartpowersystems.net>