

WATTAGE WORKSHEET

When selecting a generator, there are several important features to consider:

CHE BOWER NEEDS

This worksheet will focus on determining your running and starting watt needs.

The size of generator you need depends on your power requirements. Generally, a higher-wattage generator lets you power more items at once.



Select the items you wish to power at the same time. Using the chart on the opposite page, fill in the running watts and additional starting watt requirements on the "Your Power Needs" worksheet



Add the RUNNING WATTS of the items you wish to power. Enter this number in the TOTAL RUNNING WATTS column.



Select the ONE INDIVIDUAL ITEM with the highest number of additional starting watts. Take this ONE NUMBER, add it to your TOTAL RUNNING WATTS, and enter it in the TOTAL STARTING WATTS box.

| EXAMPLE | | | | ` |
|---|-----------------------------|---------------------------------|---------------------|---|
| TOOL OR APPLIANCE | RUNNING (RATED) WATTS | ADDITIONAL STARTING WATTS | | Т |
| 1. Refrigerator/Freezer | 550 | 1350 | | 1 |
| 2. 1/2 HP Furnace Fan | 800 | 2350) — | HIGHEST | 2 |
| 3. Deep Freezer | 500 | 500 | ADDITIONAL | 3 |
| 4. Television | 75 | - | STARTING WATTS | 4 |
| 5. Lights (6 x 75 watts) | 450 | - | | 5 |
| 6. | | | | 6 |
| 7. | | | | 7 |
| TOTAL RUNNING WATTS = | 2375 | 2350 | | |
| With this example you need a | | + 1 25/5 1 1 | TAL JNNING WATTS | |
| generator that produces at least 2375 total running watts | | | TAL STARTING | |
| and 4725 total starting watts. | | = 1 //795 1 | ATTS | |

| YOUR POWER NEEDS | | | | | | | | | ŀ |
|------------------|---|--|--|---------------------|-----|-------------------------------|------|-----------------------------|-----|
| | Т | OOL OR APPLIANCE | | NING (ED) ITS | | DDITIONA STARTING WATTS | | | |
| | 1 | | | | | | | | |
| l | 2 | | | | | | | | |
| | 3 | | | | | | | | |
| | 4 | | | | | | | | |
| | 5 | i. | | | | | | | |
| | 6 | | | | | | | | |
| | 7 | | | | | | | | |
| | | TOTAL RUNNING WATTS = | | | | | | IEST ITIONAL RTING WA | TTS |
| S | | I need a generator that produc | | | + [| | TOTA | | |
| G | | at least total runnir and total starting w | | | = [| | _ | AL START | |

FREQUENTLY ASKED QUESTIONS

How many watts does it take to power basic items in an average size house?

In a typical home, essential items will average 5000 - 7000 watts of power to run.

What is the difference between running watts and starting watts?

Running, or rated watts, are the continuous watts needed to keep items running. Starting watts are extra watts needed for two to three seconds to start motor-driven products like a refrigerator or circular saw, this is the maximum wattage the generator can produce.

Why is only one additional starting watt item used to calculate your total starting watt requirement?

Unlike running watts, starting watts are only needed during the first few seconds of operation. In most cases, only one item will start or cycle at the same time, therefore this is the most accurate estimate.

What if I can't determine the running or the starting watt requirement for a tool or appliance?

If the running watts are not on the tool or appliance, you may estimate using the following equation: **WATTS = VOLTS x AMPS.**

Only motor-driven items will require additional starting watts. The additional starting watts required may be estimated at 1 - 2x the running/rated watts.



WATTAGE WORKSHEET

WATTAGE REFERENCE GUIDE

| TOOL OR APPLIANCE | RUNNING (RATED) WATTS | ADDITIONAL STARTING WATTS | | RUNNING (RATED) WATTS | ADDITIONAL STARTING WATTS |
|----------------------------------|-----------------------------|---------------------------------|------------------------------------|-----------------------------|---------------------------------|
| HOME | | | | | |
| Essentials: | | | Clothes Dryer - Electric | 3600 | 9000 |
| Light Bulb - 60 Watt | 60 | 0 | Clothes Dryer - Gas | 1800 | 4500 |
| Light Bulb - 75 Watt | 75 | 0 | Kitchen: | | |
| Refrigerator/Freezer | 550 | 1350 | Microwave Oven - 625 Watts | 625 | 0 |
| Sump Pump - 1/3 HP | 1140 | 2850 | Microwave Oven - 1000 Watts | 1000 | 0 |
| Sump Pump - 1/2 HP | 1200 | 3000 | Coffee Maker | 1300 | 0 |
| Water Well Pump - 1/3 HP | 575 | 1440 | Electric Stove - 8" Element | 2100 | 0 |
| Electric Water Heater | 3800 | 0 | Dishwasher - Hot Dry | 1200 | 3000 |
| Heating/Cooling: | | | Food Processor | 500 | 0 |
| Space Heater | 1500 | 0 | Toaster Oven | 1500 | 0 |
| Humidifier - 13 Gal | 175 | 0 | Toaster | 850 | 0 |
| Furnace Fan Blower - 1/3 HP | 700 | 1400 | Electric Can Opener | 70 | 0 |
| Furnace Fan Blower - 1/2 HP | 800 | 2350 | Family Room: | | |
| Window AC - 10,000 BTU | 1000 | 2100 | DVD Player | 20 | 0 |
| Window AC - 12,000 BTU | 3250 | 3950 | Stereo Receiver | 450 | 0 |
| Central AC - 10,000 BTU | 1500 | 3000 | LCD TV - 32" | 75 | 0 |
| Central AC - 24,000 BTU | 3800 | 4950 | X-Box, Game Cube, Playstation | 40 | 0 |
| Central AC - 40,000 BTU | 6000 | 6700 | Other: | | |
| Heat Pump | 4700 | 4500 | Security System | 500 | 0 |
| Laundry Room: | | | 1/2 HP Garage Door Opener | 550 | 1375 |
| Iron | 1200 | 0 | Curling Iron | 1500 | 0 |
| Washing Machine | 950 | 2400 | Hair Dryer - 1250 Watt | 1250 | 0 |
| WORK | | | | | |
| DIY/Jobsite: | | | Planer/Jointer - 6" | 1800 | 4500 |
| Quartz Halogen Work Light, 300 | 300 | 0 | Table Saw/Radial Arm Saw - 10" | 1800 | 4500 |
| Quartz Halogen Work Light, 500 | 500 | 0 | Belt Sander | 950 | 2400 |
| Quartz Halogen Work Light, 1,000 | 1000 | 0 | Air Compressor - 1/3 HP | 300 | 780 |
| Airless Sprayer - 1/3 HP | 600 | 1200 | Air Compressor - 1 HP | 1400 | 3600 |
| Reciprocating Saw | 1080 | 2700 | Office Equipment: | | |
| Electric Drill - 3/8", 4 Amps | 480 | 1200 | Desktop Computer w/ 18" LCD Monito | or 300 | 0 |
| Electric Drill - 1/2", 5.4 Amps | 1100 | 1250 | Fax Machine | 150 | 0 |
| Hammer Drill | 1600 | 1400 | Laser Printer | 400 | 0 |
| Circular Saw - 7-1/4" | 2100 | 5250 | Inkjet Printer | 10 | 0 |
| Miter Saw - 10" | 1800 | 4500 | Copy Machine | 1300 | 0 |
| PLAY | | | | | |
| Tailgating/Camping | | | Color TV - 13" | 50 | 0 |
| Electric Griddle | 1500 | 0 | Outdoor Light String | 250 | 0 |
| AM/FM Radio | 10 | 0 | Cell Phone Battery Charger | 25 | 0 |
| CD/DVD Player | 100 | 0 | Inflator Pump | 175 | 0 |
| Box Fan - 20" | 100 | 0 | Crock Pot | 240 | 0 |
| <u>-</u> | | 0 | Inflator Pump | | |

The above are estimates only. Check your tool or appliance for exact wattage requirements. The wattages listed in our reference guide are based on estimated wattage requirements. For exact wattages, check the data plate or owner's manual on the item you wish to power.