

Tool or Appliance

Running (Rated)  
Watts

Additional Starting  
Watts

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## HOME & EMERGENCY USE



### ESSENTIALS:

Electric Water Heater	4000	0
Light Bulb - 40 Watt	40	0
Light Bulb - 75 Watt	75	0
Refrigerator/Freezer	1000	2000
Sump Pump - 1/3 HP	800	2100
Sump Pump - 1/2 HP	1050	2200
Water Well Pump - 1/3 HP	1250	3750

### HEATING/COOLING:

Central AC - 10,000 BTU	1500	3000
Central AC - 24,000 BTU	3800	4950
Central AC - 40,000 BTU	6000	6700
Furnace Fan Blower - 1/2 HP	800	2350
Furnace Fan Blower - 1/3 HP	700	1400
Heat Pump	4700	4500
Humidifier - 13 Gal	175	0
Space Heater	1800	0
Window AC - 10,000 BTU	1200	1800
Window AC - 12,000 BTU	3250	3950

### LAUNDRY ROOM:

Clothes Dryer - Electric	5400	1350
Clothes Dryer - Gas	700	1800

Iron	1200	0
Washing Machine	1150	3450

### KITCHEN:

Coffee Maker	1000	0
Dishwasher - Hot Dry	1500	1500
Electric Can Opener	168	0
Electric Stove - 8" Element	2100	0
Food Processor	400	0
Microwave Oven - 625 Watts	625	0
Microwave Oven - 1000 Watts	1000	0
Toaster Oven	1200	0
Toaster	850	0

### FAMILY ROOM:

Color TV - 27"	500	0
Stereo Receiver	450	0
VCR	100	0
X-Box, Game Cube, PlayStation	40	0

### OTHER:

Curling Iron	1500	0
Hair Dryer - 1250 Watt	1250	0
1/2 HP Garage Door Opener	875	2350
Security System	500	0

## WORK SITE, STORM & EMERGENCY USE



### DIY/JOB SITE:

Air Compressor - 1/4 HP	975	1600
Air Compressor - 1 HP	1600	4800
Airless Sprayer - 1/3 HP	600	1800
Belt Sander	1100	3300
Circular Saw - 7 1/4"	1400	4200
Electric Drill - 3/8", 4 Amps	440	600
Electric Drill - 1/2", 5.4 Amps	600	900
Hammer Drill	1000	3000
Miter Saw - 10"	1800	1800
Planer/Jointer - 6"	1800	1800

Reciprocating Saw	960	0
Table/Radial Arm Saw	2000	4000
Quartz Halogen Work Light, 300	300	0
Quartz Halogen Work Light, 500	500	0
Quartz Halogen Work Light, 1000	1000	0

### OFFICE EQUIPMENT:

Computer w/17" Monitor	800	0
Copy Machine	1600	0
Fax Machine	65	0
Ink jet Printer	80	0
Laser Printer	950	0

## RECREATION USE



### TAILGATING/CAMPING:

AM/FM Radio	100	0
Box Fan - 20"	200	0
CD/DVD Player	100	0
Cell Phone Battery Charger	25	0

Color TV - 13"	150	0
Electric Grill	1650	0
Outdoor Light String	250	0
Inflator Pump	50	150

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.

- 1 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.
- 2 Add the RUNNING WATTS of the items you wish to power. Enter this number in the TOTAL RUNNING WATTS column.
- 3 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.

## ADD IT UP!

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING WATTS
1. Refrigerator	800	1600
2. 1/2 HP Furnace Fan	800	1300
3. Deep Freezer	500	—
4. Television	200	—
5. Lights (6 x 75 watts)	450	—
6.		
7.		

HIGHEST  
ADDITIONAL  
STARTING  
WATTS

TOTAL RUNNING WATTS= 3050

1600

With this example you need a generator that produces at least 3050 total running watts and 4650 total starting watts.

+

3050

=

4650

TOTAL  
RUNNING  
WATTS  
  
TOTAL  
STARTING  
WATTS

## YOUR ESTIMATED POWER NEEDS

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		

TOTAL RUNNING WATTS=

I need a generator that produces at least \_\_\_\_\_ total running watts and \_\_\_\_\_ total starting watts.

+

=

TOTAL  
RUNNING  
WATTS  
  
TOTAL  
STARTING  
WATTS

## FAQ's

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

In a typical home, essential items will average 5000 to 7500 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 2 to 3 seconds to start motor-driven products like a refrigerator or circular saw, this is the maximum voltage 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 to 3 times the running/rated watts.

## WARNING!

All listed rated watts are approximate values. Please check tool or appliance for actual ratings.

LEARN MORE HERE

