



## Standby Generator Systems Wattage Worksheet

Product Focus

When selecting a Standby Generator System, you need to calculate both your running and starting wattage requirements. Running wattage is the amount of electricity necessary to run your appliances continually. Starting wattage is the additional amount of electricity needed for the 2 – 3 seconds to start electric motors commonly found in household appliances (such as a furnace fan or refrigerator). Since appliances rarely start-up at the same time, you will need to factor in the appliance with the highest additional starting watts.

Follow these simple steps to estimate your particular wattage requirement.

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

**2** Add the RUNNING WATTS (the items you wish to power). Enter the total in the TOTAL RUNNING WATTS boxes.

**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 the total in the TOTAL STARTING WATTS box.

### Example

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS
1. Refrigerator/Freezer	800	1600 <sup>1</sup>
2. 1/2 hp Furnace Fan	800	1300
3. Deep Freezer	500	500
4. Television	500	—
5. Lights (6 x 75 watts)	450	—
6.		
7.		
8.		
9.		
10.		

TOTAL RUNNING WATTS = 3050

1600 <sup>1</sup>

HIGHEST ADDITIONAL STARTING WATTS

+

3050

TOTAL RUNNING WATTS

=

4650

TOTAL STARTING WATTS

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

<sup>1</sup> Highest additional starting watts.

### Your Power Needs

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

TOTAL RUNNING WATTS =

HIGHEST ADDITIONAL STARTING WATTS

+

TOTAL RUNNING WATTS

=

TOTAL STARTING WATTS

## Frequently Asked Questions

### 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 have an additional starting requirement. The additional starting watts required may be estimated at 1 – 2x the running watts.

### 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. The guide below lists running and starting watt totals separately to help you determine which tool or appliance represents your total wattage requirement.

## Wattage Reference Guide

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS
<b>Home</b>		
Light Bulb (75 Watt)	75	—
Deep Freezer	500	500
Sump Pump	800	1200
Refrigerator/Freezer	800	1600
Water Well Pump (1/3 hp)	1000	2000
<b>Heating and Cooling</b>		
Space Heater	1800	—
Table Fan (14")	200	400
Ceiling Fan	800	1200
Furnace Fan Blower (1/2 hp)	800	1300
Window AC (10,000 BTU)	1200	1800
Window AC (12,000 BTU)	3250	3950
Central AC (10,000 BTU) <sup>1</sup>	1500	4500
Heat Pump	4700	4500
<b>Kitchen</b>		
Microwave Oven (1000 Watt)	1000	—
Coffee Maker	1500	—
Electric Stove (Single Element)	1500	—
Dishwasher (Hot Dry)	1500	1500
<b>Family Room</b>		
DVD/CD Player	100	—
VCR	100	—
Stereo Receiver	450	—
Color Television (27")	500	—
<b>Laundry Room</b>		
Iron	1200	—
Washing Machine	1150	2250
Clothes Dryer	5400	1350

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL STARTING WATTS
<b>Office Equipment</b>		
Personal Computer (with 17" Monitor)	800	—
Fax Machine	65	—
Laser Printer	950	—
Inkjet Printer	80	—
Copy Machine	1600	—
<b>Other</b>		
Security System	180	—
AM/FM Clock Radio	100	—
Garage Door Opener (1/2 hp)	480	520
Hair Dryer (1250 Watt)	1250	—
Electric Water Heater (40 Gallon)	4000	—
<b>Do-it-Yourself Job Site</b>		
Quartz Halogen Work Light	1000	—
Airless Sprayer (1/3 hp)	600	1200
Reciprocating Saw	960	—
Electric Drill (1/2 hp)	1000	1000
Circular Saw (7-1/4")	1500	1500
Miter Saw (10")	1800	1800
Planer/Joiner (6")	1800	1800
Table/Radial Arm Saw (10")	2000	2000
Air Compressor (1-1/2 hp)	2500	2500

<sup>1</sup> Please consult an electrician for your particular central ac requirements.

**Note:** 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.

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