



WATTAGE WORKSHEET

When selecting a Home Generator System, you need to calculate both your rated and surge wattage requirements. Rated, or running wattage, is the amount of electricity necessary to run your appliances continually. Surge, or starting wattage, is the additional amount of electricity needed for 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 only need to factor in the appliance with the highest additional surge 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 rated watts and additional surge watt requirements on the "Your Power Needs" worksheet.

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

3 Select the ONE INDIVIDUAL ITEM with the highest number of additional surge watts. Take this ONE NUMBER, add it to your TOTAL RATED WATTS, and enter the total in the TOTAL SURGE WATTS box.

EXAMPLE		
TOOL OR APPLIANCE	RATED (RUNNING) WATTS	ADDITIONAL SURGE (STARTING) WATTS
1. Refrigerator/Freezer	800	1600
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.		

HIGHEST ADDITIONAL SURGE WATTS

TOTAL RATED WATTS = 3050 + 1600

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

HIGHEST ADDITIONAL SURGE WATTS
+ 3050
TOTAL RATED WATTS
= 4650
TOTAL SURGE WATTS

YOUR POWER NEEDS		
TOOL OR APPLIANCE	RATED (RUNNING) WATTS	ADDITIONAL SURGE (STARTING) WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

TOTAL RATED WATTS = [] + []

I need a generator that produces at least _____ total rated watts and _____ total surge watts.

HIGHEST ADDITIONAL SURGE WATTS
+ []
TOTAL RATED WATTS
= []
TOTAL SURGE WATTS

WATTAGE REFERENCE GUIDE



FREQUENTLY ASKED QUESTIONS

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

If the rated/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 surge requirement. The additional surge watts required may be estimated at 1 – 2x the rated/running watts.

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

Unlike rated watts, surge 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 rated and surge watt totals separately to help you determine which tool or appliance represents your total wattage requirement.

TOOL OR APPLIANCE	RATED (RUNNING) WATTS	ADDITIONAL SURGE (STARTING) WATTS	TOOL OR APPLIANCE	RATED (RUNNING) WATTS	ADDITIONAL SURGE (STARTING) WATTS
HOME			OFFICE EQUIPMENT		
Light Bulb - 75 Watt	75	–	Personal Computer with 17" Monitor	800	–
Deep Freezer	500	500	Fax Machine	65	–
Sump Pump	800	1200	Laser Printer	950	–
Refrigerator/Freezer	800	1600	Inkjet Printer	80	–
Water Well Pump 1/3 HP	1000	2000	Copy Machine	1600	–
HEATING/COOLING			OTHER		
Space Heater	1800	–	Security System	180	–
Table Fan - 14"	200	400	AM/FM Clock Radio	100	–
Ceiling Fan	800	1200	Garage Door Opener - 1/2 HP	480	520
Furnace Fan Blower 1/2 HP	800	1300	Hair Dryer - 1250 Watt	1250	–
Window AC - 10000 BTU	1200	1800	Electric Water Heater - 40 Gallon	4000	–
Window AC - 12000 BTU	3250	3950	DO-IT-YOURSELF JOBSITE		
* Central AC - 10000 BTU	1500	4500	Quartz Halogen Work Light	1000	–
Heat Pump	4700	4500	Airless Sprayer - 1/3 HP	600	1200
KITCHEN			Reciprocating Saw	960	–
Microwave Oven - 1000 Watt	1000	–	Electric Drill - 1/2 HP	1000	1000
Coffee Maker	1500	–	Circular Saw - 7 1/4"	1500	1500
Electric Stove - Single Element	1500	–	Miter Saw - 10"	1800	1800
Dishwasher - Hot Dry	1500	1500	Planer/Jointer - 6"	1800	1800
FAMILY ROOM			Table/Radial Arm Saw 10"	2000	2000
DVD/CD Player	100	–	Air Compressor - 1 1/2 HP	2500	2500
VCR	100	–	<p><i>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.</i></p>		
Stereo Receiver	450	–			
Color Television - 27"	500	–			
LAUNDRY ROOM					
Iron	1200	–			
Washing Machine	1150	2250			
Clothes Dryer	5400	1350			

* Please consult an electrician for your particular central AC requirements.