SPORTSMAN®

GENERATORS

Generator Purchase Decision Guide

Choose a higher-wattage generator if you need to power more items at one time.
* Refrigerators, heaters, and microwaves require 1-3X more starting power.

1 Select the items you wish to power at the same time. Use the chart on the opposite page & fill in the running watts and starting watts requirements on the "Your Power Needs" worksheet below.

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 starting watts. Take this one number, add it to your Total Running Watts, and enter it in the Total Starting Watts box.

RUNNING = (rated) watts produced by a generator represents the amount of continuous power output

SURGE = (starting) watts produced by a generator represents the amount of temporary bursts of power output required by common tools and appliances for 2 - 3 seconds during start up.

EXAMPLE

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL * STARTING WATTS
1. Refrigerator/Freezer	700	2200
2. 1/2 HP Furnace Fan	800	2350
3. Television	500	0
4. Window AC	1200	1800
5. Sump Pump – 1/2 HP	1050	2200
6.		
7.		

HIGHEST STARTING WATTS

4250

4250 TOTAL RUNNING WATTS

\+ 2350 HIGHEST STARTING WATTS

= 6600 TOTAL STARTING WATTS NEEDED

With this example you need a generator that produces at least 4250 total running watts and 6600 total starting watts.

YOUR POWER NEEDS

TOOL OR APPLIANCE	RUNNING WATTS	ADDITIONAL * STARTING WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		

[ ] TOTAL RUNNING WATTS

\+ [ ] HIGHEST STARTING WATTS

= [ ] TOTAL STARTING WATTS NEEDED

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

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 – 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 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 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?
You may estimate using one of the following equations:

Volts x Amps = Watts
Amps / Watts = Volts
Watts / Volts = Amps

IMPORTANT

* Only motor - driven items will require starting watts. Many devises need 1 - 3 X the running/rated watts additional power to start up (Maximum Output Watts), and then require less power (Rated Watts) to run continually. For example, a refrigerator requires 2200 starting wattage with a 700 running wattage, so you would need a generator with at least 2200 watt maximum output to run ONLY a refrigerator.

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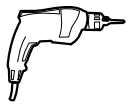
Recreational Use

TOOL OR APPLIANCE	ESTIMATED RUNNING WATTS	ADDITIONAL STARTING WATTS
Tailgating/Camping:		
Electric Grill	1650	0
AM/FM Radio	100	0
Box Fan – 20"	200	0
Outdoor Light String	250	0
Cell Phone Battery Charger	25	0
Inflator Pump	50	150

Storm / Emergency Use

TOOL OR APPLIANCE	ESTIMATED RUNNING WATTS	ADDITIONAL STARTING WATTS
Essentials:		
Light Bulb – 60 Watt	60	0
Light Bulb – 75 Watt	75	0
Refrigerator/ Freezer	700	2200
Sump Pump – 1/3 HP	800	1300
Sump Pump – 1/2 HP	1050	2200
Water Well Pump – 1/3 HP	1000	2200
Electric Water Heater	4000	0
Heating/Cooling:		
Space Heater	1800	0
Humidifier – 13 Gal	175	0
Furnace Fan Blower – 1/2 HP	800	2350
Furnace Fan Blower – 1/3 HP	700	1400
Window AC – 10,000 BTU	1200	1800
Window AC – 12,000 BTU	3250	3950
Central AC – 10,000 BTU	1500	3000
Central AC – 24,000 BTU	3800	4950
Central AC – 40,000 BTU	6000	6700
Heat Pump	4700	4500
Laundry Room:		
Iron	1200	0
Washing Machine	1150	2250
Clothes Dryer – Electric	5400	1350
Clothes Dryer – Gas	700	1800
Kitchen:		
Microwave Oven – 625 Watts	625	0
Microwave Oven – 1000 Watts	1000	0
Coffee Maker	1000	0
Electric Stove – 8" Element	2100	0
Dishwasher – Hot Dry	1500	1500
Food Processor	400	0
Toaster Oven	1200	0
Toaster	850	0
Electric Can Opener	168	0
Family Room:		
VCR	100	0
Stereo Receiver	450	0
Other:		
Security System	500	0
Garage Door Opener – 1/2 HP	875	2350
Curling Iron	1500	0
Hair Dryer – 1250 Watt	1250	0

Jobsite



TOOL OR APPLIANCE	ESTIMATED RUNNING WATTS	ADDITIONAL STARTING WATTS
DIY/Jobsite:		
Quartz Halogen Work Light, 300	300	0
Quartz Halogen Work Light, 500	500	0
Quartz Halogen Work Light, 1,000	1000	0
Airless Sprayer – 1/3 HP	600	1200
Reciprocating Saw	960	960
Electric Drill – 3/8", 4 Amps	440	600
Electric Drill – 1/2", 5.4 Amps	600	900
Hammer Drill	1000	3000
Circular Saw – 7-1/4"	1400	2300
Miter Saw – 10"	1800	1800
Planer/Jointer – 6"	1800	1800
Table Saw/Radial Arm Saw – 10"	2000	2000
Belt Sander	1200	2400
Air Compressor – 1/4 HP	970	1600
Air Compressor – 1 HP	1600	4500

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.

CAUTION:
Operating voltage and frequency requirement of all electronic equipment should be checked prior to plugging them into this generator. Damage may result if the equipment is not designed to operate within a +/- 10% voltage variation, and +/- 3 hz frequency variation from the generator name plate ratings.

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