

# SPORTSMAN<sup>®</sup>

## GENERATORS

# Generator Purchase Decision Guide

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

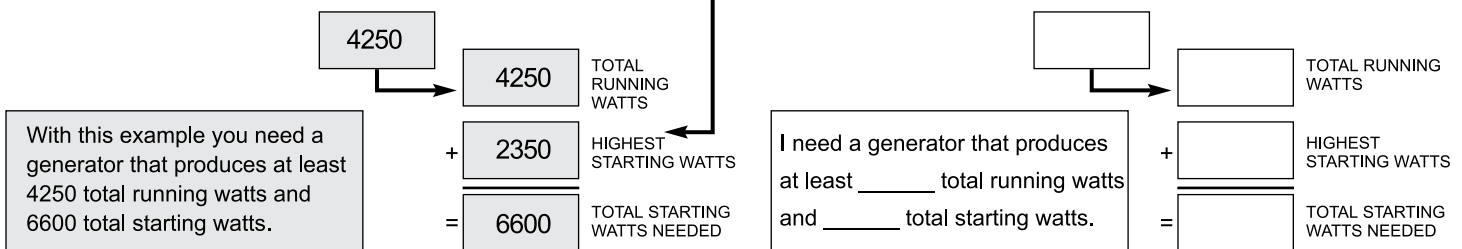
- 1** Select the items you wish to power at the same time. Using the chart on the opposite page, fill in the running watts and starting watts requirements on the "Your Power Needs" worksheet below.
- 2** Add the Running Watts of the items you wish to power. Enter this number in the Total Running Watts 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.		

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



## 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:


$$\begin{aligned} \text{Volts} \times \text{Amps} &= \text{Watts} \\ \text{Amps} / \text{Watts} &= \text{Volts} \\ \text{Watts} / \text{Volts} &= \text{Amps} \end{aligned}$$


\* Only motor-driven items will require starting watts. Many devices 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.

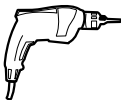
# SPORTSMAN<sup>®</sup>

## GENERATORS

# Generator Purchase Decision Guide

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

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

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