## Estimating Power Needs: Portable Generators

The more watts your portable generator produces, the more items you can power at the same time. The wattage reference chart at right contains examples of what you can power with a portable generator. Use the chart and the following steps to help you determine how powerful your portable generator should be.

- Select items from the chart that you would like to power at the same time. Fill in the RUNNING WATTS and ADDITIONAL STARTING WATTS requirements in the "Your Power Needs" Section.
- 2 Total the RUNNING WATTS of the items you wish to power at one time. Enter this number in the TOTAL RUNNING WATTS box.
- Identify the ONE INDIVIDUAL ITEM on your list with the highest number of additional starting watts. Enter this item's additional starting watts. Add it to the RUNNING WATTS of the other items listed, and enter that number in the TOTAL STARTING WATTS box.

Tool or Appliance		Running (Rated) Watts	Additional Starting (Surge) Watts
Refrigerator/Freezer		700	2200
2. 1/2 HP Furnace Fan		800	2350
3. Deep Freezer		500	1500
4. Television		500	_
5. Lights (6 x 75 watts)		450	_
With this example you need a generator that produces at least 2950 total running watts and 4500 total starting watts.	TOTAL RUNNING WATTS HIGHEST ADDITIONAL		2950
watto and 4000 total staining watto.	START	TOTAL G WATTS =	1550 <b>← 4500</b>

## Your Power Needs

Tool or Appliance	Running (Rated) Watts	Additional Starting (Surge) Watts
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

TOTAL RUNNING WATTS	
HIGHEST ADDITIONAL STARTING WATTS +	
TOTAL STARTING WATTS =	

## **GENERAC**\* Needs:

Tool or Appliance			
Light Bulb - 60 Watt	Tool or Appliance		Starting
Light Bulb - 60 Watt	HOME		
Light Bulb − 75 Watt 75 0 1500 1500 Sump Pump 1/3 HP 800 1300 Well Pump 1/2 HP 1000 2100 Electric Water Heater 4000 0 0 Heating / Cooling Space Heater 1800 0 0 Humidifier − 13 Gal 175 0 0 Electric Para Blower − 1/2 HP 800 2350 Electric Water Heater 19 800 2350 Furnace Fan Blower − 1/2 HP 800 2350 Furnace Fan Blower − 1/3 HP 700 1400 Window AC − 10,000 BTU 1200 3600 Window AC − 10,000 BTU 3250 9750 Central AC − 10,000 BTU 3250 9750 Central AC − 24,000 BTU 3800 11400 Heat Pump 4700 4500 Laundry Room Iron 1200 0 0 Washing Machine 1150 2250 Clothes Dryer − Electric 5400 6750 Clothes Dryer − Electric 5400 6750 Microwave Oven − 625 Watts 625 0 Microwave Oven − 625 Watts 625 0 Microwave Oven − 1000 Watts 1000 0 Electric Stove − 8 in. Element 2100 0 0 Electric Stove − 8 in. Element 2100 0 0 Electric Can Opener 850 0 Electric Can Opener 875 2350 Hair Dry 27 in. 500 0 Color TV − 27 in. 500 0 Electric Can Opener 875 2350 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Dri	Essentials		
Light Bulb − 75 Watt 75 0 1500 1500 Sump Pump 1/3 HP 800 1300 Well Pump 1/2 HP 1000 2100 Electric Water Heater 4000 0 0 Heating / Cooling Space Heater 1800 0 0 Humidifier − 13 Gal 175 0 0 Electric Para Blower − 1/2 HP 800 2350 Electric Water Heater 19 800 2350 Furnace Fan Blower − 1/2 HP 800 2350 Furnace Fan Blower − 1/3 HP 700 1400 Window AC − 10,000 BTU 1200 3600 Window AC − 10,000 BTU 3250 9750 Central AC − 10,000 BTU 3250 9750 Central AC − 24,000 BTU 3800 11400 Heat Pump 4700 4500 Laundry Room Iron 1200 0 0 Washing Machine 1150 2250 Clothes Dryer − Electric 5400 6750 Clothes Dryer − Electric 5400 6750 Microwave Oven − 625 Watts 625 0 Microwave Oven − 625 Watts 625 0 Microwave Oven − 1000 Watts 1000 0 Electric Stove − 8 in. Element 2100 0 0 Electric Stove − 8 in. Element 2100 0 0 Electric Can Opener 850 0 Electric Can Opener 875 2350 Hair Dry 27 in. 500 0 Color TV − 27 in. 500 0 Electric Can Opener 875 2350 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Drill − 1/2 in. 54 Amps 440 0 0 0 Electric Dri		60	0
Sump Pump 1/3 HP	Light Bulb – 75 Watt	75	0
Well Pump 1/2 HP	Deep Freezer	500	1500
Electric Water Heater	Sump Pump 1/3 HP	800	
Heating / Cooling	Well Pump 1/2 HP	1000	2100
Space Heater		4000	0
Humidifier - 13 Gal			,
Furnace Fan Blower – 1/2 HP 700 1400  Furnace Fan Blower – 1/3 HP 700 1400  Window AC – 10,000 BTU 1200 3600  Window AC – 12,000 BTU 3250 9750  Central AC – 24,000 BTU 3800 11400  Heat Pump 4700 4500  Laundry Room  Iron 1200 0  Washing Machine 1150 2250  Clothes Dryer – Electric 5400 6750  Clothes Dryer – Gas 700 1800  Kitchen 700 2200  Microwave Oven – 625 Watts 625 0  Microwave Oven – 625 Watts 1000 0  Electric Stove – 8 in. Element 2100 0  Dishwasher – Hot Dry 1500 1500  Food Processor 400 0  Toaster 850 0  Electric Can Opener 168 0  Electric Can Opener 168 0  Family Room  VCR 100 0  Stereo Receiver 450 0  Coller Garage Door Opener 875 2350  Hair Dryer – 1250 Watts 1250 0  Curling Iron 1500 0  Other Security System 500 0  Curling Iron 1500 0  Electric Drill – 3/8 in, 4 Amps 440 600  Electric Drill – 3/	Space Heater		
Furnace Fan Blower - 1/3 HP	Humidifier – 13 Gal		
Window AC − 10,000 BTU         1200         3600           Window AC − 12,000 BTU         3250         9750           Central AC − 10,000 BTU         1500         4500           Central AC − 24,000 BTU         3800         11400           Heat Pump         4700         4500           Laundry Room         Iron         1200         0           Washing Machine         1150         2250           Clothes Dryer − Electric         5400         6750           Clothes Dryer − Gas         700         1800           Kitchen         8         700         1800           Kitchen         8         625         0           Microwave Oven − 625 Watts         625         0         0           Microwave Oven − 1000 Watts         1000         0         0           Coffee Maker         1000         0         0           Electric Stove − 8 in. Element         2100         0         0           Dishwasher − Hot Dry         1500         1500         1500           Food Processor         400         0         0           Toaster Oven         1200         0         0           Toaster Oven         168         0         0<	Furnace Fan Blower – 1/2 HP		
Window AC − 12,000 BTU         3250         9750           Central AC − 10,000 BTU         1500         4500           Central AC − 24,000 BTU         3800         11400           Heat Pump         4700         4500           Laundry Room         1150         2250           Clothes Dryer − Electric         5400         6750           Clothes Dryer − 1000         0         0           Microwave Oven − 625 Watts         625         0           Microwave Oven − 1000 Watts         1000         0           Clother Dry         1500         1500         0           Clettic Stowe = 8 in. Element         2100		+	
Central AC - 10,000 BTU	Window AC - 10,000 BTU		
Central AC - 24,000 BTU   3800   11400   Heat Pump   4700   4500   Laundry Room			
Heat Pump	Central AC 24 000 BTU		<del></del>
Laundry Room   Iron		+	<del></del>
Iron		4700	4500
Washing Machine		1200	1 0
Clothes Dryer - Electric   5400   6750			
Clothes Dryer - Gas			
Kitchen         Refrigerator/Freezer         700         2200           Microwave Oven – 625 Watts         625         0           Microwave Oven – 1000 Watts         1000         0           Coffee Maker         1000         0           Electric Stove – 8 in. Element         2100         0           Dishwasher – Hot Dry         1500         1500           Food Processor         400         0           Toaster Oven         1200         0           Toaster Oven         1200         0           Toaster Oven         1200         0           Toaster Oven         1200         0           Toaster Oven         168         0           Family Room         VCR         100         0           VCR         100         0         0           Stereo Receiver         450         0         0           Color TV – 27 in.         500         0         0           Video Game System         40         0         0           Other         Security System         500         0         0           1/2 HP Garage Door Opener         875         2350         0           Hair Dryer – 1250 Watts         1250 <td></td> <td></td> <td></td>			
Refrigerator/Freezer			
Microwave Oven - 625 Watts         625         0           Microwave Oven - 1000 Watts         1000         0           Coffee Maker         1000         0           Electric Stove - 8 in. Element         2100         0           Dishwasher - Hot Dry         1500         1500           Food Processor         400         0           Toaster Oven         1200         0           Toaster Oven         168         0           Electric Can Opener         168         0           Family Room         VCR         100         0           VCR         100         0         0           Stereo Receiver         450         0         0           Color TV - 27 in.         500         0         0           Video Game System         40         0         0           Other           Security System         500         0         0           VOR         100         0         0         0           1/2 HP Garage Door Opener         875         2350         0         0           Hair Dryer - 1250 Watts         1250         0         0         0           Curling Iron         1500		700	2200
Microwave Oven - 1000 Watts		625	0
Electric Stove - 8 in. Element		1000	0
Dishwasher - Hot Dry	Coffee Maker	1000	0
Toaster Oven	Electric Stove – 8 in. Element	2100	0
Toaster Oven	Dishwasher – Hot Dry	1500	1500
Toaster			
Electric Can Opener			
Family Room		+	
VCR		168	] 0
Stereo Receiver	Family Room	100	1 0
Color TV - 27 in.         500         0           Video Game System         40         0           Other         T           Security System         500         0           1/2 HP Garage Door Opener         875         2350           Hair Dryer - 1250 Watts         1250         0           Curling Iron         1500         0           WORK         T         0           DIY / Jobsite         T         0           Quartz Halogen Work Light         1000         0           Airless Sprayer - 1/3 HP         600         1200           Reciprocating Saw         960         0           Electric Drill - 3/8 in., 4 Amps         440         600           Electric Drill - 1/2 in., 5.4 Amps         600         900           Circular Saw - 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor - 1/4 HP         975         1600           Air Compressor - 1 HP         1600         4500           Office Equipment         T           Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         9			<del></del>
Video Game System         40         0           Other         Security System         500         0           1/2 HP Garage Door Opener         875         2350           Hair Dryer – 1250 Watts         1250         0           Curling Iron         1500         0           WORK         DIY / Jobsite         Omegan Work Light         1000         0           Airless Sprayer – 1/3 HP         600         1200           Reciprocating Saw         960         0         0           Electric Drill – 3/8 in., 4 Amps         440         600         900           Circular Saw – 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor – 1/4 HP         975         1600           Air Compressor – 1 HP         1600         4500           Office Equipment         Computer w/17 in. Monitor         800         0           Fax Machine         65         0         0           Laser Printer         950         0         0           Copy Machine         1600         0         0           PLAY         Tailgating / Camping           Electric Grill         1650         0			
Other         Security System         500         0           1/2 HP Garage Door Opener         875         2350           Hair Dryer – 1250 Watts         1250         0           Curling Iron         1500         0           WORK           DIY / Jobsite           Quartz Halogen Work Light         1000         0           Airless Sprayer – 1/3 HP         600         1200           Reciprocating Saw         960         0           Electric Drill – 3/8 in., 4 Amps         440         600           Electric Drill – 1/2 in., 5.4 Amps         600         900           Circular Saw – 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor – 1/4 HP         975         1600           Air Compressor – 1 HP         1600         4500           Office Equipment         0         0           Computer w17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill			
Security System			, ,
1/2 HP Garage Door Opener     875     2350       Hair Dryer – 1250 Watts     1250     0       Curling Iron     1500     0       WORK       DIY / Jobsite       Quartz Halogen Work Light     1000     0       Airless Sprayer – 1/3 HP     600     1200       Reciprocating Saw     960     0       Electric Drill – 3/8 in., 4 Amps     440     600       Electric Drill – 1/2 in., 5.4 Amps     600     900       Circular Saw – 7 1/4 in.     1400     2300       Belt Sander     1200     2400       Air Compressor – 1/4 HP     975     1600       Air Compressor – 1 HP     1600     4500       Office Equipment       Computer w/17 in. Monitor     800     0       Fax Machine     65     0       Laser Printer     950     0       Copy Machine     1600     0       PLAY     Tailgating / Camping       Electric Grill     1650     0       AM/FM Radio     100     0       CD/DVD Player     100     0		500	0
Hair Dryer - 1250 Watts		875	2350
WORK         DIY / Jobsite           Quartz Halogen Work Light         1000         0           Airless Sprayer – 1/3 HP         600         1200           Reciprocating Saw         960         0           Electric Drill – 3/8 in., 4 Amps         440         600           Electric Drill – 1/2 in., 5.4 Amps         600         900           Circular Saw – 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor – 1/4 HP         975         1600           Air Compressor – 1 HP         1600         4500           Office Equipment         Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0		1250	0
DIY / Jobsite   Quartz Halogen Work Light   1000   0   Airless Sprayer – 1/3 HP   600   1200   Reciprocating Saw   960   0   Electric Drill – 3/8 in., 4 Amps   440   600   Electric Drill – 1/2 in., 5.4 Amps   600   900   Circular Saw – 7 1/4 in.   1400   2300   Belt Sander   1200   2400   Air Compressor – 1/4 HP   975   1600   Air Compressor – 1 HP   1600   4500   Office Equipment   Computer w/17 in. Monitor   800   0   Fax Machine   65   0   Laser Printer   950   0   Copy Machine   1600   0   PLAY   Tailgating / Camping   Electric Grill   1650   0   AM/FM Radio   100   0   CD/DVD Player   100   0	Curling Iron	1500	0
Quartz Halogen Work Light         1000         0           Airless Sprayer – 1/3 HP         600         1200           Reciprocating Saw         960         0           Electric Drill – 3/8 in., 4 Amps         440         600           Electric Drill – 1/2 in., 5.4 Amps         600         900           Circular Saw – 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor – 1/4 HP         975         1600           Air Compressor – 1 HP         1600         4500           Office Equipment         Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
Airless Sprayer – 1/3 HP         600         1200           Reciprocating Saw         960         0           Electric Drill – 3/8 in., 4 Amps         440         600           Electric Drill – 1/2 in., 5.4 Amps         600         900           Circular Saw – 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor – 1/4 HP         975         1600           Air Compressor – 1 HP         1600         4500           Office Equipment         Computer w/17 in. Monitor         800         0           Fax Machine         65         0         0           Laser Printer         950         0         0           Copy Machine         1600         0         0           PLAY         Tailgating / Camping         Electric Grill         1650         0           AM/FM Radio         100         0         0           CD/DVD Player         100         0			
Reciprocating Saw			
Electric Drill - 3/8 in., 4 Amps			
Electric Drill - 1/2 in., 5.4 Amps   600   900	Reciprocating Saw		
Circular Saw - 7 1/4 in.         1400         2300           Belt Sander         1200         2400           Air Compressor - 1/4 HP         975         1600           Air Compressor - 1 HP         1600         4500           Office Equipment           Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
Belt Sander	Circular Saw 7, 1/4 in		
Air Compressor – 1/4 HP     975     1600       Air Compressor – 1 HP     1600     4500       Office Equipment     0       Computer w/17 in. Monitor     800     0       Fax Machine     65     0       Laser Printer     950     0       Copy Machine     1600     0       PLAY       Tailgating / Camping       Electric Grill     1650     0       AM/FM Radio     100     0       CD/DVD Player     100     0			<del></del>
Air Compressor – 1 HP         1600         4500           Office Equipment         0         4500           Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
Office Equipment           Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
Computer w/17 in. Monitor         800         0           Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0		1000	1 1000
Fax Machine         65         0           Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0		800	0
Laser Printer         950         0           Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
Copy Machine         1600         0           PLAY         Tailgating / Camping           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
PLAY           Tailgating / Camping         60           Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0	Copy Machine		
Electric Grill         1650         0           AM/FM Radio         100         0           CD/DVD Player         100         0			
AM/FM Radio         100         0           CD/DVD Player         100         0			
CD/DVD Player 100 0			
Box Fan   200   0			
	BOX FAIN	200	0