

Power Needs

Determining Your Power Needs

There are two parts to determining your power requirements. 1) The running watts required, calculated by adding the running watts of each of the appliances to be run and 2) Peak watts required, calculated by adding the total running watts needed to the highest level of surge watts required (additional start watts).

Example

Appliance	Running Watts	Surge* Watts
Refrigerator/Freezer	700	2200
Television	500	0
Well Pump 1/2 HP	1000	3000
Lights (4 x 60 Watts)	240	0
Space Heater	1800	0
Total Running Watts	4240	
Highest Surge Watts		3000

* Additional watts required to start the appliance

In this example you will need a generator that produces a minimum output of 4240 running watts and has a peak output of 7240 watts.

Worksheet

Appliance	Running Watts	Surge* Watts
A. Total Running Watts		
B. Highest Surge Watts		

Running Watts Requirement: _____

Peak Watts Required (A+B): _____

Watts Estimate Chart

Appliance	Running Watts	Surge* Watts
Household		
AC, Central 10,000 BTU	1500	4500
AC, Window 10,000 BTU	1200	3600
AM/FM Radio	100	0
CD/DVD Player	100	0
Cloths Drier - Gas	700	1800
Coffee Maker	1000	0
Curling Iron	1500	0
Deep Freezer	500	1500
Dishwasher - Hot Dry	1500	1500
Electric Stove - 8" Element	2100	0
Electric Water Heater	4000	0
Fan	200	0
Furnace Fan Blower - 1/2 HP	800	2250
Furnace Fan Blower - 1/3 HP	700	1400
Hair Dryer	1000	0
Hot Plate/Griddle	1500	0
Iron	1400	0
Light Bulb - 60 Watt	60	0
Light Bulb - 75 Watt	75	0
Microwave Oven - 1000 Watts	1000	0
Microwave Oven - 625 Watts	625	0
Refrigerator/Freezer	700	2200
Security System	500	0
Space Heater	1800	0
Stereo Receiver	450	0
Sump Pump 1/2 HP	800	1300
Television - 27"	500	0
Toaster	850	0
Toaster Oven	1200	0
VCR	100	0
Video Game System	40	0
Washing Machine	1150	2250
Well Pump 1/2 HP	1000	3000
Tools		
Air Compressor 1 HP	1600	4500
Air Compressor 1/4 HP	975	1600
Circular Saw	1400	2300
Electric Drill 1/2" - 5.4 Amp	600	900
Electric Drill 3/8" - 4 Amp	440	600
Halogen Work Light - 1000 Watt	1000	0
Reciprocating Saw	960	0
Office Equipment		
Computer w/Monitor	800	0
Copy Machine	1600	0
Fax Machine	65	0
Laser Printer	950	0