

## System Sizing Worksheet – Your Electrical Needs

Electrical Device	Wattage (volts x amps)	x	Hours of Daily Use	x	Days Used per Week	÷	7	=	Ave. Daily Watt-Hours
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		
		x		x		÷	7		

\*15% to 25% is added to compensate for inefficiencies in the system (batteries, inverter, line loss)

**Total Average Watt-Hours per Day**  
**15% Loss Correction Factor\***  
**Adjusted Average Watt-Hours per Day**

	<b>x 1.15</b>

SOURCE: Power With Nature book by Rex Ewing (PixyJack Press)

## Energy Consumption of Appliances

Using a WATTS-UP? Meter, we measured the following appliances

<b>Appliance</b>	<b>Continuous Draw (Watts)</b>		
Computer, desktop	90	Sewing Machine (Bernina)	70
Computer, laptop	24	Serger (Pfaff)	140
17" monitor	100	Clothes Dryer (propane)	300
17" LCD (flat screen) monitor	50	Clothes Iron	1,200
HP LaserJet printer (in use)	600	Hair Curling Iron	55
HP Inkjet printer (in use)	15	Hair Dryer (high/low)	1,500/400
Microwave (full power)	1,400	Furnace Fan (1/3 hp / 1/2 hp)	700/875
Coffee Maker	900	Guitar Amp (ave. volume)	45
Toaster, 2-slice	750	Jimi Hendrix volume	8,500
Amana Range (propane): Burners	0		
Oven (with glow bar; when heating)	380	<b>Appliance</b>	<b>Watt Hours</b>
Electric Range (small/large burner)	1,250/2,100	Dishwasher, cool dry	736 watt-hours/load
Blender	350	Clothes Washer	
Mixer	120	(front-loading)	145 watt-hours/load
Slow Cooker (high/low)	240/180	Air Conditioning	1,500 watts/ton
20" Television	50		(or 10,000 Btu) of capacity
27" Television	120		
50" LCD Television	175		
Stereo System	25		
Stereo, small portable	10		
Vacuum, Oreck	410		
Vacuum, Dirt Devil Upright	980		
Table-top Fountain	5		

*We have not listed refrigerators or freezers since their efficiency is getting better every year. Look at the **EnergyStar.gov** website for the latest ratings. There are many models at, or under, 400 kWh per year, or about 1 kWh per day.*

SOURCE: *Power With Nature* book by Rex Ewing (PixyJack Press)