Electric Appliance Consumption

How much electricity do your appliances use?

Refrigeration, electric water heaters, and lighting eat up more than half of the energy dollars of the average residential customer; however, you may be surprised by the amount of electricity that your other appliances use. The figures in the chart below are based upon modern, efficient appliance models. Your costs may vary depending on the age, size, and model of the appliance, its location, and how it is used. Older models may use twice as much electricity!

We have highlighted the average home's biggest electricity users on the chart below. The figures are based on the average hours used per month are based on a family of four.

The Marquette Board of Light and Power current rate is 7.05¢ per kilowatt hour (kwh).

Appliance	Average Wattage	Average hours used per month	Average kwh per month	Average cost per month
Air Cleaner	50	500	25	1.75
Air Conditioner				
Central	5000	120	600	42.00
Room (5000 btu)	700	120	84	5.88
Room (8000 btu)	1100	120	132	9.24
Answering Machine	185	16	3	0.21
Aquarium (filter, light, and heater)	95	360	34	2.38
Blender	400	2	1	0.07
Bug Zapper	40	300	12	0.84
Car Engine Heater	500	200	100	7.00
	1000	200	200	14.00
Clock	2	750	2	0.14
Copier	100	10	1	0.07
Clothes Dryer (add 20 kwh per added person)				
Electric (3 people)	5000	23	115	8.05
Electric (4 people)	5000	27	135	9.45
Gas (electric use)	325	310	9	0.63
Coffee Maker (drip – brew cycle)	850	8	7	0.49
Warm Cycle	70	50	4	0.28
Computer Components				
CPU	60	120	7	0.49
Dot Matrix Printer – Idle	25	60	2	0.14
Dot Matrix Printer – Printing	55	30	2	0.14
Laser Printer – Idle	25	60	2	0.14
Laser Printer – Printing	650	30	20	1.40
Modem	20	120	2	0.14
Monitor (monochrome)	30	120	4	0.28
Monitor (color)	80	120	10	0.70
Curling Iron	40	35	1	0.07

Appliance	Average Wattage	Average hours used per month	Average kwh per month	Average cost per month
Dehumidifier (see footnote #1)	632	315	198	13.86

1. Most dehumidifiers are used during the summer in basements. Eliminate or reduce the need for a dehumidifier by keeping basement windows closed, reducing air leakage and covering any bare earth with thick plastic sheeting.

Dishwasher – wash cycle (motor) (see footnote #2)	200	25	5	0.35

2. On the average, dishwashers us about 56-kilowatt hours per month for hot water (about 6.782). It is usually more efficient to do full loads in a dishwasher than to wash dishes by hand. Actual savings depends on your dishwashing habits and the type of machine you use. If you have a dishwasher, use the energy saving-no heat option if available.

Deep Fryer	1475	4	6	0.42
Electric Blanket	175	84	15	1.05
Crock Pot	200	10	2	0.14
Fan				
Attic	370	176	65	4.55
Ceiling Paddle	80	78	6	0.42
Desktop	85	71	6	0.42
Window	200	75	15	1.05
Fax Machine	185	160	30	2.10
Food Processor	400	2	1	0.07
Freezer (15 cu. ft.)				
Manual Defrost	400	175	70	4.90
Frost-Free	500	260	130	9.10
Griddle	1200	3	4	0.28
Hair Curlers	350	3	1	0.07
Hair Dryer (hand-held)	1000	3	3	0.21
Heat Lamp (infrared)	250	6	2	0.14
Heat Tape (6.5 watts per ft – 10 feet)	65	720	47	3.29
Heating Systems				
Oil Burner Motor	265	217	58	4.06
Electric Baseboard (6 ft. 250 watts per ft.) (see footnote #3)	1500	240	360	25.20
Furnace Fan	310	267	83	5.81
Hot Water Circulator	145	500	73	5.11

3. Electric heat and electric water tanks can be the largest users of electricity in the home. The amount of electricity that you use depends on how often you use these appliances.

Hot Plate	1250	4	5	0.35
Humidifier	175	360	63	4.41
Iron (hand)	1100	4	4	0.28
Lighting				
Incandescent	100	100	10	0.70
Compact Fluorescent: 25 watt (equals 100 watt incandescent)	27	100	3	0.21
Flourescent: 2 lamps 4 ft w/ballast	88	100	9	0.63

Appliance	Average Wattage	Average hours used per month	Average kwh per month	Average cost per month
(Lighting, con't.)				
High Pressure Sodium w/ballast	130	90	11	0.77
Mercury Vapor w/20 watt ballast	120	90	12	0.84
Outdoor Flood	120	90	11	0.77
Outdoor Halogen	90	90	8	0.56
Microwave Oven	1475	14	21	1.47
Mixer (hand)	80	1	1	0.07
Motor (745 watts/horsepower, power tools, compressors, etc.)		5	4	0.28
Oven Self-Cleaner (1-3 hour cycle)	2660	12	32	2.24
	2500	3	8	0.56
Popcorn Popper				
Hot Air	1400	1	1	0.07
Oil	575	1	1	0.07
Radio/Tape Player	70	99	7	0.49
Range				
Small burner on High	1300	8	10	0.70
Larger Burner on High	2400	8	19	1.33
Refrigerator – Pre-1990 Models				
Apartment Size	250	120	30	2.10
Frost Free Apartment Size	350	175	60	4.20
*w/Freezer (14 cu. ft.)	350	228	80	5.60
*w/Freezer, Frost Free (14 cu. ft.)	520	230	120	8.40
*w/Freezer, Frost Free (16-18 cu. fit.)	625	240	150	10.50
*w/Freezer, Side-by-Side (20 cu. ft.)	700	285	200	14.00
Refrigerator – Post 1990 Models				
Apartment Size	250	120	16	1.12
Frost Free Apartment Size	350	175	29	2.03
*w/Freezer (14 cu. ft.)	350	228	31	2.17
*w/Freezer, Frost Free (14 cu. ft.)	520	230	50	3.50
*w/Freezer, Frost Free (16-18 cu. fit.)	625	240	68	4.76
*w/Freezer, Side-by-Side (20 cu. ft.)	700	285	112	7.84
Sewing Machine	75	12	1	0.07
Shaver	15	3	1	0.07
Stereo	100	86	9	0.63
Sump Pump	300	10	3	0.21
Swimming Pool Filter (if ran 24 hours a day)	750	720	540	37.80
Television				
Black and White	55	150	8	0.56
Color	200	150	30	2.10
Toaster	1150	3	3	0.21
Toaster Oven	1500	8	12	0.84
Trash Compactor	400	15	6	0.42

Appliance	Average Wattage	Average hours used per month	Average kwh per month	Average cost per month
Typewriter (home size)	30	10	1	0.07
Vacuum	650	8	12	0.84
Vaporizer				0.07
Cold Air	40	30	1	1.61
Warm Air	750	30	23	
VCR	40	30	1	0.07
Washing Machine (motor use)	510	15	8	0.56
Including Warm Water (see footnote #4)		15	41	2.87

4. Water heating accounts for about 90% of the energy used by a washing machine. These figures are based on a warm wash and cold rinse cycle. Use the cold cycle as much as possible.

Water Bed Heater (see footnote #5)	375	375	141	9.87

5. Keeping a waterbed covered with a comforter can save more than 30%. Insulating the side of most beds can save about 10%.

Water Heater	4500	83	374	26.18
w/WR-10 Jacket	4500	70	315	22.05

Conversion

Appliances usually list data on their name plate. You can use the following formula to convert the data to kwh:

Amps X Volts = Watts

Watts ÷ 1000 = kwh

To find how much the appliance uses in one hour, multiply kwh X .07 cents/kwh.

For example, a 1500 watt space heater uses 1.5 kwh every hour it runs (1500 ÷ 1000 = 1.5). 1.5 x .07¢ = .105¢. Every hour the space heater runs it uses .105¢ worth of electricity. If the space heater runs 12 hours per day, it uses $1.26 worth of electricity per day (.105¢ X 12 hours). If the space heater runds 12 hours per day and 30 days per month, it uses $37.80 in a month ($1.26 per day X 30 days per month = $37.80).