

Understanding Electricity Usage & Costs

Understanding how you use electricity in your home is the first step in making smarter, more informed decisions regarding your energy consumption. This fact sheet can help you learn what it costs to run some common electrical devices and where you might have opportunities to save money.

By using the formula below, you can calculate a device's kilowatt-hour (kWh) usage and approximate cost. Wattage can usually be found on the bottom or back of the device. If it is not, you can multiply the amperage, which is required to be listed on the device, by the voltage, which is typically 120. Larger appliances, such as clothes dryers, use 240 volts.

$$\frac{\text{Appliance wattage} \times \text{hours in use}}{1,000} \times 12.17 \text{ cents} = \text{Average cost (0.1217)}$$



Electronic Devices	Approximate Wattage	Avg. Hrs. Used/Mo.	Avg. kWh Used/Mo.	Average Cost/Mo.
Kitchen				
Coffee maker	1,000	5	5	\$0.61
Dishwasher	330	13.75	4.5	\$0.55
Microwave oven	1,500	15	22.5	\$2.74
Refrigerator	225	288	64.8	\$7.88
Laundry				
Clothes dryer	2,790	14.75	41.2	\$5.01
Clothes washer	255	18	4.6	\$0.56
Iron	1,100	5	5.5	\$0.67
Lighting				
Compact fluorescent bulb (CFL)	25	30	0.8	\$0.09
LED light bulb (equivalent to 100w incandescent)	13	30	0.4	\$0.05
Incandescent bulb	100	30	3	\$0.37
Heating & Cooling				
Whole-house fan	350	360	126	\$15.33
Ceiling fan	35	360	12.6	\$1.53
Dehumidifier	750	360	270	\$32.86
Furnace fan	295	720	212.4	\$25.85
Portable space heater	1,320	77.75	102.6	\$12.49
Water heater, 40 gal.	4,500	75	337.5	\$41.07
Window fan	70	360	25.2	\$3.07
Home Electronics				
Desktop computer	200	60	4.5	\$1.46
Flatscreen monitor, LED 24"	40	60	2.5	\$0.29
Laptop, 15"	60	60	1.5	\$0.44
Television, LED 30"	30	180	21.6	\$0.66
Television, LED 60"	88	180	21.6	\$1.93
Television, LCD 50"	150	180	14.4	\$3.29
Gaming Systems				
PS5™	180	30	4.1	\$0.66
Nintendo Switch™	18	30	1	\$0.06
Xbox Series X™	180	30	3.4	\$0.66
Miscellaneous				
Clock radio	5	720	3.6	\$0.44
Electric blanket	400	90	36	\$4.38
Vacuum cleaner	542	2	1.1	\$0.13
Well pump	725	14	10.2	\$1.24

Here are a few common household electronic devices. The costs shown on this sample fact sheet are based on an average total price of 12.17 cents per kWh. The costs for electricity in your home may vary depending on usage patterns, actual electric rate, the wattage of appliances and the amount of time they are in use.

For a better understanding of your usage and how you can help reduce your electricity consumption, visit www.energysavepa.com and click on the Home Energy Analyzer.

Important Notes: These estimates are based on average size and use of each device. Operating costs may vary considerably due to the type, size, frequency and duration of use, as well as differences in family living habits. Older products often use far more energy than new, energy-efficient models.

The wattages listed on this chart came from several sources, including the U.S. Department of Energy's website: www.energy.gov.

The price per kWh is subject to change.

