

What Uses Watts in Your Home

Electricity usage is calculated in kilowatt-hours. A kilowatt-hour is 1,000 watts used for one hour. As an example, a 100-watt light bulb operating for ten hours would use one kilowatt-hour.

How to calculate electric usage cost:

1. Volts x Amps = Watts
2. Watts ÷ 1,000 = Kilowatts (kW)
3. Kilowatts (kW) x Hours of Use = Kilowatt Hours (kWh)
4. Kilowatt Hours (kWh) x [kWh rate](#) = Cost of Usage
5. Add TVA Power Cost Adjustment charge per kWh

Below are some examples of electrical appliances found in most homes. These examples are using a 10 cents per kWh rate.

Appliance/Equipment	Avg. Usage	Monthly kWh	Cost/Month
<u>Comfort & Health</u>			
Air Conditioner – Window 12,000 BTU (1,400 Watts)	8 hours/day	341	\$34.10
Dehumidifier (257 Watts)	12 hours/day	94	\$9.40
Fan – Furnace (300 Watts)	7 hours/day	64	\$6.40
Fan – Ceiling (125 Watts)	12 hours/day	46	\$4.60
Fan – Attic (1000 Watts)	2 hours/day	61	\$6.10
Heat Pump (Average Rating) (1,800 sq. ft. house) 7.7 HSPF*	daily	Average Annual Cost	\$841.50
Heat Pump (High Efficiency) (1,800 Sq. ft. house) 8.5 HSPF*	daily	Average Annual Cost	\$762.30
Heat Pump (Geothermal) (1,800 sq. ft. house) Equiv. 13.3 HSPF*	daily	Average Annual Cost	\$487.10
Heater – Portable (1500 W)	8 hours/day	365	\$36.50
Humidifier (177 Watts)	8 hours/day	43	\$4.30
Water Heater (4500 W)	3 hours/day	411	\$41.10
Hair Dryer (1,000 W)	15 min./day	7.6	\$0.76
* Heating Season Performance Factor (an efficiency rating)			
** Based on 4,296 Heating Degree Days. Cooling costs would be approximately 40% of total energy costs.			
<u>Food Prep. & Preservation</u>			
Blender/Food Processor (400 Watts)	1 hour/week	2	\$0.20
Coffee Maker (894 Watts)	one hour/day	27	\$2.70
Dishwasher (1,200 Watts) (excludes hot water costs)	one hour/day	37	\$3.70
Microwave Oven (1,450 W)	30 min./day	22	\$2.20
Range (12,200 Watts)	30 min./day	186	\$18.60
Freezer 15 Cu. Ft. (341 W.)	12 hrs/day	124	\$12.40
Refrigerator – 14 Cu. Ft. (440 W.)	12 hrs/day	161	\$16.10

Refrigerator – 18 Cu. Ft. (manual defrost – deduct 35%)	12 hrs/day	180	\$18.00
<u>Laundry</u>			
Clothes Dryer (4,900 W)	6 loads/week	90	\$9.00
Washer (512 Watts) (Excludes water costs)	6 loads/week	9	\$.90
<u>Home Entertainment/Recreation</u>			
42" Plasma TV (320 Watts) (instant-on tvs use some electricity continuously)	35 hours/week	44.8	\$4.48
Home Computer (500 W) Including Monitor	4 hours/day	61	\$6.10
Hot Tub (5,000 W)	2 hrs/day	304	\$30.40
Pool Heater (incl. motor)	avg/daily	670	\$67.00
Pool Pump (1 hp)	continuous	1240	\$124.00
<u>Lighting</u>			
40-Watt Bulb (40 W)	4 hours/day	5	\$.50
Equivalent compact fluorescent	4 hours/day	1.375	\$.14
60-Watt Bulb (60 W)	4 hours/day	7	\$.70
Equivalent compact fluorescent	4 hours/day	1.625	\$.16
75-Watt Bulb (75 W)	4 hours/day	9	\$.90
Equivalent compact fluorescent	4 hours/day	2.5	\$.25
100-Watt Bulb (100 W)	4 hours/day	12	\$1.20
Equivalent compact fluorescent	4 hours/day	3.25	\$.33
<u>Farm</u>			
Electric Fence Charger	daily	2	\$.20
Heater (tractor engine block) (600W)	10 hrs/day	182	\$18.20
Heater (livestock tank)	8 hrs/daily	365	\$36.50
Auto Battery Charger (600W)	2 hours	36	\$3.60
Well Pump (750-1000W)	avg./10% usage	40	\$4.00