



# Electric Appliance



# Energy Usage

## Cost of Operating Home Appliances

This guide provides the approximate cost of operating various home appliances based on industry average use and current MID rates. *These estimates are for appliances 5 years old or newer.*

AVERAGE WATTS	APPLIANCE TYPE	APPROXIMATE ENERGY USE	WINTER COST (October - April)	SUMMER COST (May - September)
<b>Cooling</b>				
4,500	Central air conditioner	4.5 kWh per hour	\$0.61 per hour	\$0.73 per hour
1,000	Air conditioner, room or window - 10,000 btu @10.0 EER	1 kWh per hour	\$0.13 per hour	\$0.16 per hour
400	Evaporative cooler	0.4 kWh per hour	\$0.05 per hour	\$0.07 per hour
350	Whole house fan	0.35 kWh per hour	\$0.05 per hour	\$0.06 per hour
100	Ceiling fan - 52" (fan only) Energy Star rated will be less.	0.1 kWh per hour	\$0.01 per hour	\$0.02 per hour
500	Attic Fan	0.5 kWh per hour	\$0.07 per hour	\$0.08 per hour
<b>Heating</b>				
7,000	Baseboard heater	7 kWh per hour	\$0.94 per hour	\$1.14 per hour
1,500	Heater, portable	1.5 kWh per hour	\$0.20 per hour	\$0.24 per hour
5,000	Central heat pump	5 kWh per hour	\$0.67 per hour	\$0.81 per hour
750	Forced air fan	0.75 kWh per hour	\$0.10 per hour	\$0.12 per hour
4,500	Electric water heater, quick recovery	15 kWh per day	\$2.02 per day	\$2.44 per day
400	Waterbed heater - hard side bed	4 kWh per day	\$0.54 per day	\$0.65 per day
50	Electrostatic Air Cleaner on Furnace	0.05 kWh per hour	\$0.01 per day	\$0.01 per day
<b>Kitchen Appliances</b>				
600	Refrigerator, 22 c.f.* auto defrost	4.6 kWh per day	\$0.62 per day	\$0.75 per day
800	Refrigerator, 21 c.f.* side-by-side auto defrost	6.4 kWh per day	\$0.86 per day	\$1.04 per day
460	Refrigerator, 16 c.f.* auto defrost	3.7 kWh per day	\$0.50 per day	\$0.60 per day
450	Freezer, 15 c.f.* auto defrost	3.6 kWh per day	\$0.48 per day	\$0.59 per day
350	Freezer, 15 c.f.* manual defrost	2.8 kWh per day	\$0.38 per day	\$0.46 per day
288	Beverage Cooler	2.58 kWh per day	\$0.35 per day	\$0.42 per day
1,200	Dishwasher (mechanical operation)	1 kWh per load	\$0.13 per load	\$0.16 per load
	Dishwasher (electric water heating)	2 kWh per load	\$0.27 per load	\$0.33 per load
1,250	Range, top burner (high setting)	1.25 kWh per hour	\$0.17 per hour	\$0.20 per hour
2,300	Oven (medium setting)	2.3 kWh per hour	\$0.31 per hour	\$0.37 per hour
3,000	Oven, self-cleaning feature	3 kWh per hour	\$0.40 per hour	\$0.49 per hour
1,500	Microwave (ten-minute use)	0.25 kWh per use	\$0.03 per use	\$0.04 per use
1,200	Toaster oven	1.2 kWh per hour	\$0.16 per hour	\$0.20 per hour
1,000	Coffee maker	0.25 kWh per use	\$0.03 per use	\$0.04 per use
1,200	Electric skillet	1.2 kWh per hour	\$0.16 per hour	\$0.20 per hour
1,400	Deep fryer	1.4 kWh per hour	\$0.19 per hour	\$0.23 per hour
1,000	Instant hot water tap	1 kWh per hour	\$0.13 per hour	\$0.16 per hour
650	Bread machine	0.65 kWh per hour	\$0.09 per hour	\$0.11 per hour

\*c.f. = cubic feet

AVERAGE WATTS	APPLIANCE TYPE	APPROXIMATE ENERGY USE	WINTER COST (October - April)	SUMMER COST (May - September)
	<b>Laundry</b>			
4,350	Clothes dryer - Electric	3 kWh per load	\$0.40 per load	\$0.49 per load
300	Clothes dryer - Gas (turn the drum)	0.3 kWh per load	\$0.04 per load	\$0.05 per load
512	Washing machine, automatic (mechanical operation)	0.256 kWh per load	\$0.03 per load	\$0.04 per load
	Washing machine, automatic (heating water electrically)	6 kWh per load	\$0.81 per load	\$0.98 per load
1,100	Iron	1.1 kWh per hour	\$0.15 per hour	\$0.18 per hour
	<b>General Household</b>			
12	Electric clock	8.64 kWh per month	\$1.16 per month	\$1.40 per month
80	Electric Blanket - twin or per side queen/king	0.8 kWh per night	\$0.11 per night	\$0.13 per night
1,000	Hair dryer	1 kWh per hour	\$0.13 per hour	\$0.16 per hour
100	Stereo	0.1 kWh per hour	\$0.01 per hour	\$0.02 per hour
100-250	TV, Rear Projection	0.2 kWh per hour	\$0.03 per hour	\$0.03 per hour
150-850	TV - LCD or Plasma, depending upon the size	0.5 kWh per hour	\$0.07 per hour	\$0.08 per hour
55-120	Cable Box DVR (24/7)	1.32 kWh per day	\$0.18 per day	\$0.21 per day
35-120	Cable Box not DVR (24/7)	0.84 kWh per day	\$0.11 per day	\$0.14 per day
17	DVD or CD Player (7 watts standby)	0.07 kWh per day	\$0.01 per day	\$0.01 per day
50	Ethernet 24/7	36 kWh per month	\$4.85 per month	\$5.85 per month
22	Wireless Enhancer 24/7	15.8 kWh per month	\$2.13 per month	\$2.57 per month
300 +	Computer w/Monitor (67 watts sleep)	0.3 kWh per hour	\$0.04 per hour	\$0.05 per hour
60	Laptop Computer	0.06 kWh per hour	\$0.01 per hour	\$0.01 per hour
115	Home Copier	0.15 kWh per hour	\$0.02 per hour	\$0.02 per hour
50	Printer Inkjet	0.05 kWh per hour	\$0.01 per hour	\$0.01 per hour
350	Printer Color Laserjet (48 watts ready mode; 15 watts sleep mode)	0.35 kWh per day	\$0.05 per day	\$0.06 per day
60	Fax Machine (3 watts sleep mode)	0.06 kWh per day	\$0.01 per day	\$0.01 per day
12	Phone Charger	8.64 kWh per month	\$1.16 per month	\$1.40 per month
20	Idoc 24/7	0.48 kWh per day	\$0.06 per day	\$0.08 per day
30	Residential Gateway Battery Back Up	22 kWh per month	\$2.96 per month	\$3.58 per month
187	Xbox 360 (158 watts at idle)	0.19 kWh per hour	\$0.03 per hour	\$0.03 per hour
198	Playstation 3 (177 watts at idle)	0.2 kWh per hour	\$0.03 per hour	\$0.03 per hour
18	Wii (14 watts at idle)	0.336 kWh per day	\$0.05 per day	\$0.05 per day
750	Vacuum cleaner	0.75 kWh per hour	\$0.10 per hour	\$0.12 per hour
1000	1 HP Domestic Well pump	1 kWh per hour	\$0.13 per hour	\$0.16 per hour
1,500	Swimming pool pump	1.5 kWh per hour	\$0.20 per hour	\$0.24 per hour
	Spa (average filtering operation)	210 kWh per month	\$28.27 per month	\$34.13 per month
	<b>Lighting</b>			
100	Incandescent Bulb	0.1 kWh per hour	\$0.01 per hour	\$0.02 per hour
27	Compact Fluorescent Bulb	0.027 kWh per hour	\$0.0036 per hour	\$0.0044 per hour
172	4 ft - 4 Lamp Fluorescent Fixture	0.172 kWh per hour	\$0.02 per hour	\$0.03 per hour
100	Dusk to Dawn Light	0.1 kWh per hour	\$0.01 per hour	\$0.02 per hour

### How Costs Were Calculated

All calculations shown above are based on the following MID 2009 residential rates:

Winter Rates: \$0.1317 per kWh (Tier 2, over 500 kWh)

Summer Rates: \$0.1590 per kWh (Tier 2, over 500 kWh)

kWh = kilowatthour

For more information contact the MID Energy Management Dept. - (209) 526-7339

