

# COST PER WATT HOUR

## Doing the Calculation

Once you have the watts for each and every item and then determine the power charge per kilowatt hour (Kwh), just run the numbers:

To find the cost to run one item:

1. Total up the watts per day for the item to get total watts/day.
2. Divide total watts/day by 1000 to get the total kilowatt hours (Kwh) per day.
3. Multiply the Kwh/day times the cost per Kwh\* to get cost/day.
4. To find out the average cost per month, multiply the cost/day by 30. (Power company monthly billing cycles vary from 28-33 days)

If you want to find the cost of all items:

1. Total up all the watts per day for each item to get total watts/day.
2. Divide total watts/day by 1000 to get the total kilowatt hours (Kwh) per day.
3. Multiply the Kwh/day times the cost per Kwh to get your total cost/day.
4. To find out the average total cost per month, multiply the total cost/day by 30. (Power company monthly billing cycles vary from 28-33 days)

Example: 1 inexpensive regular-sized human heating pad = 50 watts, calculated at PG&Es standard rate, averaged:

$$50 \times 24 \text{ hours/day} = 1200 \text{ watts}$$

$$1200 \text{ divided by } 1000 = 1.2 \text{ Kwh}$$

$$1.2 \times 0.12 = \$0.144/\text{day}$$

$$\$0.144/\text{day} \times 30 = \$4.32/\text{month}$$

Across the board the average cost per Kwh is \$0.12. In actuality, if you are on the regular rate schedule, you are paying soome low amount say \$0.115 for your Basic Kwh allowance and some other higher rate for any thing in excess of your Basic allowance. But none the less, figures for cost per kilowatt hour range based on metropolis and those way out in the country.

Example: 2 a pump running at 120VAC using 7 amps is consuming 840 watts times 24 hours a day. This calculates out to 840 watts times 24 hours a day times 30 days in a month equals 604,800 watt hours divided by the 1,000 watthours for kilowatt calculations equals 604.1 kilowatts times the rate of Say 13 cents per kilowatt hours equals approximately \$78.62 per month for a 7amp motor running

24 hours a day.

$840 \text{ watts} \times 24 \text{ hours/day} = 20,160 \text{ watts per day}$

$20,160 \text{ watts divided by } 1000 \text{ for kilowatts} = 20.16 \text{ kwh}$

$20.16 \times 0.13 \text{ cents per kwh} = \$2.62 \text{ per day}$

$\$2.62 \text{ per day} \times 30 \text{ days in a month} = \$78.62 \text{ per month}$

Note: those using 3 phase power have different power factors to consider.