

## THP103 - ESTIMATING ENERGY USAGE

1. Plug any appliance into the AmWatt
2. Plug the AmWatt into any standard electrical outlet
3. Turn on the appliance

The reading displayed on the AmWatt screen is considered “Continuous” or “Running” watts or amps. This number is useful for assisting you in determining the approximate sizes of the loads in your home that might be connected to a generator and transfer switch. The THP103 is accurate at +/- 5% for loads from 1 amp – 15 amps (120 watts – 1,875 watts).

You can also use the THP103 AmWatt Load Tester readings to estimate energy usage for most household appliances. Remember, this is only an estimate as many appliances will draw more power at different times – like a refrigerator. This information is derived from U.S. Department of Energy website:

[http://www.energysavers.gov/your\\_home/appliances/index.cfm/mytopic=10040](http://www.energysavers.gov/your_home/appliances/index.cfm/mytopic=10040)

### FORMULA FOR ESTIMATING ENERGY CONSUMPTION

**(Continuous Wattage) x (Hours Used Per Day) ÷ 1,000 = Daily Kilowatt-hour (kWh) consumption**

Now that you have your daily consumption (kWh), you can use this to estimate how much this appliance costs to run daily, weekly, monthly and annually.

**(kWh) x (utility rate) = daily rate**

**(daily rate) x (days used in month) = monthly rate**

**(daily rate) x (number of days used in year) = annual rate**

You just need your Utility Company’s rate per kWh consumed. You should find this information on your Utility Bill. This rate is referred to as **kilowatt cents per hour**. The national average is around 10 cents.

**Example: Laptop Computer, 4 hours on per day.**

**This example assumes you have the computer on every day, with the computer drawing 200 watts continuously for 4 hours each day. The computer would be turned off the remainder of the day.**

AmWatt shows the computer runs at 200 continuous watts

$(200 \text{ watts}) \times (4 \text{ hours per day}) \div 1,000 = .8 \text{ (kWh)}$

Cost per day:

$(.8 \text{ kWh}) \times (\text{example utility rate } .10) = \mathbf{\$0.08}$

Cost per month:

$(\$0.08) \times (30 \text{ days in month}) = \mathbf{\$2.40}$

Cost per year:

$(\$0.08) \times (365 \text{ days in year}) = \mathbf{\$29.20}$