Minimum Power usage for typical Inverters of different Power ratings
(6 May 07)

Three power inverters were tested to measure the DC power usage when no AC Power was being used. In other words this is wasted power while on but not in use. All of the inverters were purchased from http://www.harborfreight.com/. Search on the Item number to find them.

91813-2VGA
Chicago Electric Power Tools

60 WATT CONTINUOUS/100 WATT SURGE PLUG-IN POWER INVERTER

$13.99
$9.99
Sale

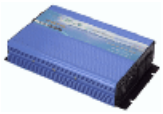
Measured 1.46 watts usage at no load or at 60 watts about 2.45 percent wasted power.

92708-4VGA
Chicago Electric Power Systems

400W/800W MODIFIED SINEWAVE POWER INVERTER

$39.99
$19.99
Sale

Measured 5.2 watts usage at no load or at 400 watts about 1.3 percent wasted power.



91848-7VGA
Chicago Electric Power Systems

700 WATT CONTINUOUS/1800 WATT SURGE POWER INVERTER

$89.99

Measured 11.8 watts usage at no load or at 700 watts about 1.7 percent wasted power.

Bottom line summary: As a rule of thumb one can expect about 2.5% wasted power for low power inverters and about 1.5% wasted power for higher wattages units. To minimize power usage when using inverters do the following.

1) Turn the inverter on only when you need to use AC power.
2) Use the smallest continuous rated wattage inverter that will do the job at hand. This minimizes wasting of power.

As an example: One should not use a 700 watt inverter if all one needs is 40 watts. Use the 60 watt inverter and save the difference or 11.8 – 1.5 = 10.3 watts