

Calculating Standby Power

Calculating standby power is often referred to as true power or real power. It is mainly used by consumers trying to figure out what their system's standby power is. It is the power you are billed for by the service utility company. When the system is off, it still might be drawing amps. This is apparent power, it does not represent operating amps. In order to determine the actual wattage being used, you must apply the power factor. All systems have a power factor of less than 1, the only exception is resistance loads such as electric resistance heaters.

Formula

Power in Watts = $E \times I \times PF$

E = Voltage

I = Current

PF = Power Factor

Power factor for our units is between .2 & .3

Example:

System in standby mode, 208 volts, 1 amp using power factor of .2.

$208 \times 1 \times .2 = \text{Standby Watts}$

41.6 standby Watts.