

Re: Power Measurement: Watts Vs. Volts

Source: <http://sci.tech--archive.net/Archive/sci.electronics.basics/2005-08/msg00387.html>

- *From:* Don Bowey <dbowey@xxxxxxxxxxxx>
 - *Date:* Thu, 11 Aug 2005 18:26:56 -0700
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On 8/11/05 12:57 PM, in article
1123790276.708092.3420@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx, "tlbs"
<tlbs101@xxxxxxxxxxxx> wrote:

- > Batteries are rated by their terminal voltage AND by their capacity,
- > measured in Amp-Hours. Many AAA, AA, C, D cells have their capacity
- > printed on the side, as well as their terminal voltage. Since the
- > terminal voltage is known, and the capacity is known, the total
- > available energy is also known (Volts x Amps x seconds = energy, in
- > Joules). This is a simplistic answer -- the actual available energy
- > is different from V x Capacity x time, because the terminal voltage
- > drops with: current draw, rate of current draw, time, temperature, and
- > other environmental factors.
- >
- > The rate at which you can draw that energy (Watts) from a battery is
- > also more complex -- if you need to know that you should consult the
- > manufacturer's data sheets. Automobile batteries list their "cold
- > cranking Amps" -- that is a pretty good indicator of how much power you
- > can draw from it (CCA x V).
- >
- > In measuring radio emission energy, the measurement is the electric
- > field strength. The units are Volts/meter (or microVolts/meter).
- > Power in free space is measured in Watts/meter².
- >
- > Only when the RF energy is converted to RF current through an antenna,
- > can direct power be measured. Then other factors must be taken into
- > account: antenna impedance, antenna gain, antenna type. For a given
- > field strength different power levels may be obtained depending on the
- > antenna.

>
Are you just ranting or responding to a post? It's hard to tell when you
don't quote anything (such as above).

Go away and read up on board etiquette.

Re: Power Measurement: Watts Vs. Volts

- **Follow-Ups:**

- ◆ **Re: Power Measurement: Watts Vs. Volts**
◇ From: tlbs

- **References:**

- ◆ **Power Measurement: Watts Vs. Volts**
◇ From: Kaimbridge
- ◆ **Re: Power Measurement: Watts Vs. Volts**
◇ From: tlbs

- Prev by Date: **Re: Resistors and capacitors – pull-ups and pull-downs?**
- Next by Date: **Re: Augh! WTF 'megabaud'?**
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