

# How Do You Convert Amp Hours to Watt Hours?

When measuring your RV electrical system requirements, you'll need to convert watt-hours to amp hours. This will assist you in deciding on the voltage you will use, battery sizes, and even the thickness of wires for your solar system design, etc.

The equation is **watt-hours = amp-hours x volts**.

In this instance, if you don't know the number of watts, you'll multiply the total number of amp-hours times the voltage.

→ ***Need a quick refresher? Check out Amps, Volts, and Watts: Differences Explained***

As an example, if you have a 12V battery for your RV, and your device is rated for 100Ah, you'll need to multiply the amp hours by the volts:  $100\text{Ah} \times 12\text{V} = 1200\text{Wh}$ .

To showcase how amp-hours does not equal energy, you could get the same 1200 watt-hours from a 24V battery. You'd multiply:  $50\text{Ah} \times 24\text{V} = 1200\text{Wh}$ .