

## How To Buy A Laptop Battery?

When purchasing a battery for your laptop computer, the first thing a consumer should look for is the reputation of the product at mind. If the product is made by the manufacturer of your laptop (i.e. Sony, Compaq, Dell, etc), you can usually be sure it is a quality product. However, many manufactures do not actually manufacturer, instead they are the brander of the product. for example, if you open up a genuine Sony laptop battery, you may find that the power cells inside are actually made by Toshiba, Panasonic, or a similar big name company. Sony in this case has just made the plastic case of the battery. This goes to show that the brand of the battery you are buying does not necessarily mean that the quality is superior. Many third party brands use the exact same power cells as original manufacturers. Using a third party manufacturer is often a good way to go when buying a battery, as there are usually many extra benefits. for instance, most third party batteries are much lower in price than original manufacturers? Secondly, they usually offer a superior warranty, as they realize that in order to win the consumer's confidence; they must stand behind their product. A one year warranty is a must. Don't buy any battery with a warranty less than one year. Batteries have been known to die early, and a three month warranty could leave you high and dry.

The next main thing a consumer should look for is the type of battery. Batteries can be made using several chemicals. for laptops, there are four main types. They are Ni-Cad, Ni-MH, Li-ion, and Li-Poly. There is no major manufacturer that still makes Ni-Cad laptop batteries, as they are a very old and primitive type of power. Ni-MH is newer and more advanced, but is not as good as its Li-ion and Li-Poly counterparts. If we compare the last three types (Ni-MH, Li-ion, Li-Poly), we find that Ni-MH batteries weigh more than the other two, but produce less current than the other two. Li-ion and Li-Poly are the most advanced types of batteries on the market, and you should try to get one of these two types if possible. Most laptops that come with one type of battery can not use any other type of battery, meaning that if your laptop came with a Ni-Cad, it must be replaced by another Ni-Cad. The same goes for the other types. Please note that in some cases, this does not apply. Some laptops that come with a Ni-MH battery can be replaced with a stronger Li-ion

one.

Lastly you must look at the power rating of the item you? As technology advances, so do power ratings. The battery you bought last year may be twice as strong this year, and might even be the same physical size. Batteries have two main ratings on them: Volts and Amperes. Because laptop batteries do not carry a very large amount of power when compared to larger batteries such as car batteries, most companies show their ratings with Volts and Milliamperes. One thousand Milliamperes equals 1 Ampere. When buying a battery, always go for the battery with the most Milliamperes (or mAh). Batteries are also rated by Watt-Hours, perhaps the simplest rating of all. This is found by multiplying the Volts and the Amperes together. We will now show you an example of finding the Watt-Hours for our example battery.

Our example battery is 14.4 Volts, 3600mAh  
(remember that 3600mAh is equal to 3.6 Amperes).

$$14.4 \times 3.6 = 51.84$$

This battery has 51.84 Watt-Hours. The term Watt Hour signifies the energy needed to power one watt for one hour. Thus this battery can power 51.84 watts for one hour. Suppose your laptop runs at 25.92 watts (this may be unlikely, but let use this just for simplicity). This battery could power your laptop for 2 hours. People usually associate the word watts with light bulbs, and yes, this battery could power a 40 watt light bulb for about an hour and 18 minutes, a 60 watt light bulb for about 52 minutes, or a 100 watt light bulb for 31 minutes; it the same idea.

The reason we have shown you watt-hours is because oftentimes the volts and Amperes vary. for example our laptop that uses a Li-ion 14.4 Volt, 3600mAh battery may use a NI-MH battery that is 9.6 Volts, 4000mAh. Now let do the math and find out which battery is stronger.

$$\text{Li-ion: } 14.4 \text{ Volts} \times 3.6 \text{ Amperes} = 51.84 \text{ Watt Hours}$$

$$\text{Ni-MH: } 9.6 \text{ Volts} \times 4 \text{ Amperes} = 38.4 \text{ Watt Hours}$$

So the Li-ion is stronger.

**Note:** If you need more information about battery, pls have a look at our website: [www.aulaptopbattery.com](http://www.aulaptopbattery.com).