

# Laptop Battery Report. How to test your Laptop Battery in Windows.

SCRIPT:

Here in this video we are going to show you how to test the capacity of your windows laptop battery.

This process can be done for any version of Windows, from 7 to 11, with the exception of users running in Windows S Mode. This also isn't a fail proof test, there are certain scenarios where this test may fail, and its not obvious as to why. Later in the video we will go over a specific OEM and line of their laptops whereupon performing this test will result in an erroneous report.

"The first thing you want to do is open an elevated powershell, terminal, or command prompt. By elevated, I simply mean to open one of those programs with admin privileges.

"Now that we have the elevated prompt open, you will type the following:

```
powercfg /batteryreport - hit enter
```

This will generate a battery report and deposit it at the default location.

As you can see, its not the most convenient place to navigate to, therefore how about we generate the report in an easier place to find, while also giving us the ability to view the report quickly?

By pressing the up arrow key, it will automatically input the last command we gave the terminal, but now were going to add something at the end of this.

Before we hit enter type the following: `/output` - now this allows us to save the generated file to a specified location as well as name it whatever we choose.

For utmost convenience we will save it in the root of the C drive, by pressing: `c:\` - and now we have to name it; we'll use the letters "BR" and we also must give it the appropriate file extension, which is "html"

Now you can hit enter.

It generates the report in the C drive, precisely where we directed it.

Now, to open it, just type: `C:\br.html` and hit enter.

To navigate to this battery report at a later time you can simply open the Run command and type `C:\BR.html`.

The battery report will open in your default browser, and you can scroll down to see the relevant details:

You will see the name, manufacturer, serial number, chemistry, the design capacity, full charge capacity, and lastly the cycle count.

We're paying attention most to design capacity and full charge capacity.

The design capacity is the minimum amount of Wh the battery should hold from the manufacturer. The full charge capacity is currently the maximum amount of Wh your battery can hold on a full charge.

Therefore, you want to divide the full charge capacity by

the design capacity to understand the life of your battery expressed as

a percentage of its design. Here we have 49Wh divided by 51Wh to find the battery at 96%.

This completes the essentials of the battery report test.

Previously I stated that this battery test is not a 100% certain method; you could test the battery, it could show as 100%, but the battery might very well may be bad. Your taskbar could show that your battery is at 0% and not charging, this is often a tell tale sign of a potentially bad battery. However that scenario, where the report shows a good battery, but is actually bad, is less common than not, therefore generally you can rely on this method.

At this point in time I do, however, want to point out a common scenario that effects primarily consumer line HP laptops. The issue is the battery report incorrectly states the full charge capacity as the design capacity. This reading may be erroneous, you may generate a readout of 22Wh as the designed capacity, with a battery that is infact designed for 41Wh. Therefore you will see 22Wh for both the designed capacity, and the fully charged capacity, and from there you may be contented to know your battery is a 100% capacity, when in fact its actually just slight above 50%.

In the video here you will have seen me running a battery report on an HP Pavilion x360 14m-DY1023DX.

You see here how both the design and full charge capacity are identical? This may or may not be correct and the only way to know is to either open up the back cover of the machine and check the physical battery, or check with the manufacturer online to find out. We're in luck here, because this typically is an HP problem, rather than a distributed problem that spans multiple manufacturers, we only have to check one place, and HP has a wonderful website that is dedicated to finding out the factory specs of your machine. This website is the HP Part Surfer found at [Partsurfer.hp.com](https://partsurfer.hp.com) - I have a link to this website in the description of this video.

<LINK - <https://partsurfer.hp.com/> >

From here we want to put in the part number, serial number, or the product id. I prefer the product ID because you can find it in the system information program in Windows.

To find the product ID we are going to use the run command to launch system information. By pressing the windows key and r at the same time it opens the run command. As you can see it was the last thing ran from here, but we will type msinfo32 and launch system information. Here under the system sku we will find the product ID. You can ignore the last part, the part that begins with pound sign ABA. All you need is the string of characters up until the # sign.

For us, our part number is 4p8p0ua. First you will see it lists the Laptop's product series, not necessarily your precise model number, but thats ok. We put in the product ID, which is sufficient. The list is in alphabetical order, it first lists the AC adapter, then the antenna and here we have our battery. Tucked into the product description is the Wh.

So we can confirm that the factory minimum Wh is 43, and compare it to our battery report's listed 40Wh. Dividing 40 by 43 and we arrive at 93%.

So there we have it, an easy to perform and mostly reliable method to test your laptop's battery in Windows.