

What is TBW? What is the TBW parameter in an SSD?

What is TBW? What is the TBW parameter in an SSD? Compared with HDD, SSD appears quite a lot of new information that we do not know, it will encounter inadequacies during use. In this article, what is the Software Tips that will guide you about TBW? The meaning of TBW in SSD.

In the present age, SSD products are gaining popularity very strongly with low price and high performance. But when you learn about SSD, there are many new and revolving terms. Compared with HDD, SSD appears quite a lot of new information that we do not know, it will encounter inadequacies during use. In this article, what is the Software Tips that will guide you about TBW? The meaning of TBW in SSD.



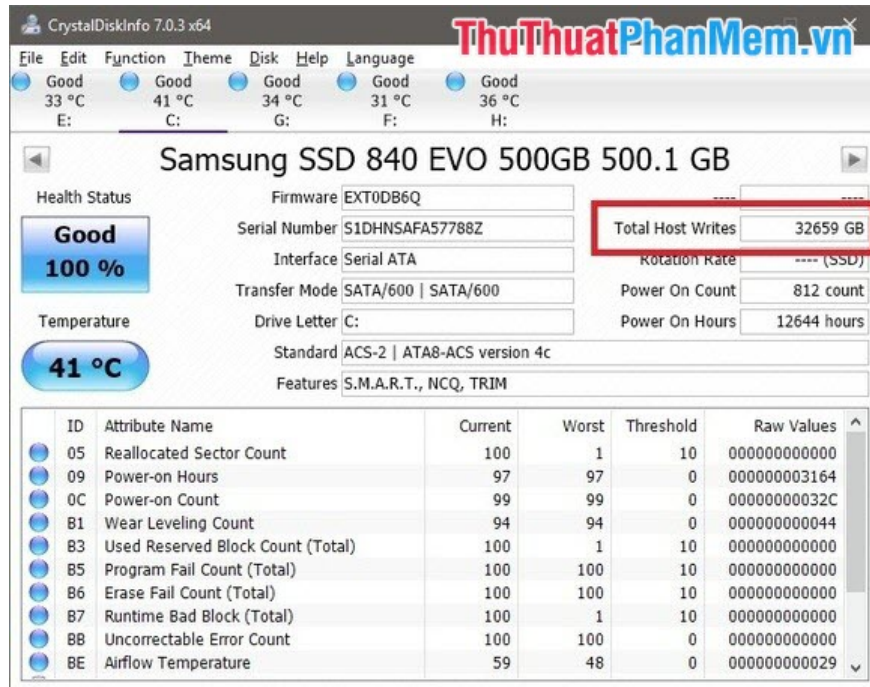
1. What is TBW?

TBW is an abbreviation of Tera Byte Writen, translated into Vietnamese, it means that the capacity of Tera Byte has been written on your hard drive. If you do not know what Tera Byte (T) is, this is also a storage unit like: MB, Gigabyte, .

1. 1 Tera Byte = 1024 GB = 1048576 MB

As we all know, HDD performance speed is reduced when the disk rotates too much and the spindle no longer holds the number of revolutions as when the factory makes the data on the disk read longer. But when it came to SSD, the disk was gone, the spinning wheel disappeared. Instead are the Controller (controller) and the memory chip on the device. If you think that SSD has removed that mechanical part, it will never be reduced performance, slow, broken then you are wrong. Memory chips on an SSD also have a certain amount of storage

when we use it, which is called TBW (recorded T capacity).



2. The meaning of TBW in SSD

TBW shows Tera byte parameters stored on SSD, this helps users to grasp and control the device they are using most effectively. It is simple that manufacturers also rely on this parameter to decide whether your SSD product is warranted or not.

Why does an SSD product have a 3-year warranty but is not covered while it is still in the warranty period?

This is a question that is posed a lot when you bring SSD to warranty. The reason is simple because you have passed the TBW that the manufacturer allows you to use. That is, they provide a 3-year warranty with the normal use of SSDs, not with the fact that you force the SSD to work too much.

Usually with an SSD, the ability that it can withstand TBW is very high. With some common products, the level of TBW that the product can tolerate ranges from 50-80 TBW. And with high-end products, it's even higher.

TBW level does not have common ground. For higher capacity SSDs, the higher the TBW is, and is similar to the smaller capacity SSDs. So if you use it normally, there is no need to think too much about this issue.

Warranty table of Samsung SSD (High-end model)

960 EVO	250GB	3 years or 100 TB TBW
	500GB	3 years or 200 TB TBW
	1TB	3 years or 400 TB TBW
960 PRO	512GB	5 years or 400 TB TBW
	1TB	5 years or 800 TB TBW
	2TB	5 years or 1,200 TB TBW
970 EVO, 970 EVO Plus	250GB	5 years or 150 TB TBW
	500GB	5 years or 300 TB TBW
	1TB	5 years or 600 TB TBW
	2TB	5 years or 1,200 TB TBW
970 PRO	512GB	5 years or 600 TB TBW
	1TB	5 years or 1,200 TB TBW

How to keep SSD durable, long lasting performance?

The answer to this problem is very easy to answer. SSDs have high performance when TBW is small, the smaller the better. TBW only increases when we install data into SSD such as: Installing applications, copying data, . Knowing this, we need to split the data when using is done. For example:

1. Application: Install directly into SSD
2. Long-term data: Storage on SSDs (Because long-term storage can be forever, it doesn't matter much)
3. Short-term data: For data that only takes a few days and deletes it immediately, it should be stored on the HDD so that TBW will not increase.

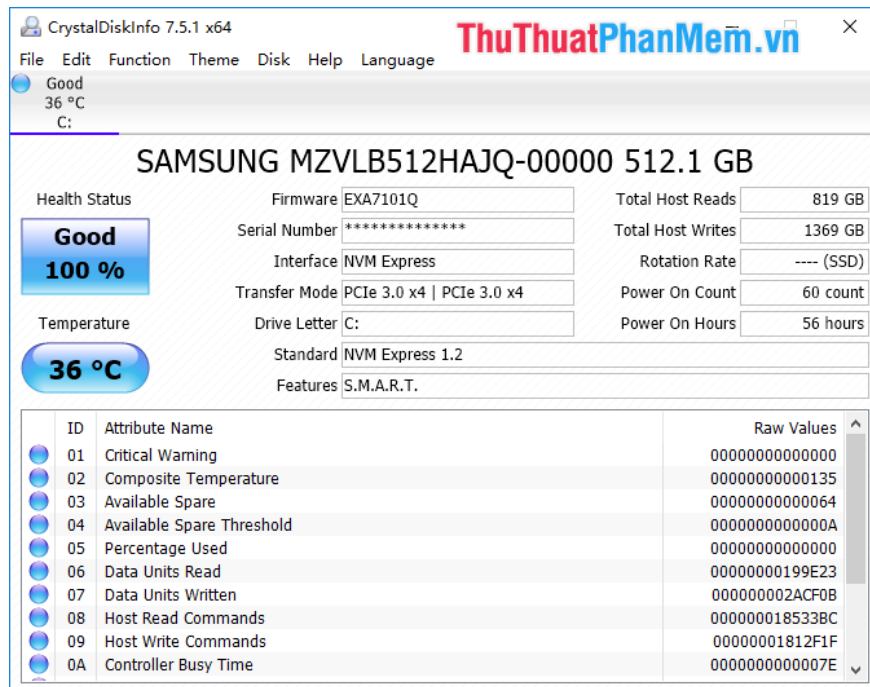


TBW is also the deciding factor when we buy used products

With older items such as SSDs, we can not appraise with the naked eye because they have a shell made of alloy so very durable and beautiful. Only specialized tools for viewing SSDs are currently displayed. For SSDs with high TBW, it is best to ignore them, not to buy because they will have to change sooner or later.

The software to view TBW and SSD parameters effectively is CrystalDisk Info

Link Download: <https://crystalmark.info/en/software/crystaldiskinfo/>



Some important parameters:

- **Total Host Reads:** Total read capacity of the drive: 819 Gb (0.8 TB)
- **Total Host Writes:** Total recorded capacity of the drive: 1369 GB (1.3 TB)
- **Power On Count:** Number of times the computer starts: 60 times.
- **Power On Hours:** Time to use: 56 hours.

Thus, in this article, the Software Tips introduced you to TW and what they mean in SSD. Have a nice day!

You finished reading the article "**What is TBW? What is the TBW parameter in an SSD?**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.