

Guide to buying a new Windows laptop

Introduction

This guide is designed to help if you are looking to buy a new **Windows** laptop. Note that these are the opinions of SeniorNet Warkworth Technical team in May 2020. It is meant to be fairly simple and will change as technology and prices vary.

Overview

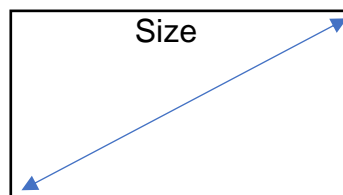
Most laptops available today are suitable for general use. That is, they will be okay for email, Web browsing, creating documents and spreadsheets, photo storage and editing, streaming music and video, etc.

What to look for

Style

“Traditional” laptops are still common and many people are familiar with them. They are basically portable versions of the traditional desktop PC. These days there are alternatives which are much lighter and often feature a touch-screen as well as a keyboard. These are sometimes called “Modern PCs” and are a cross between a tablet and a laptop. They are designed to take advantage of Cloud (on-line) storage and so often have less internal storage space.

Display size – This largely determines the price of the laptop. You need to consider which is more important to you; portability or readability. A smaller display (screen) is easier to carry around but a larger screen will be easier and more comfortable to work with. Screen size is still usually stated in inches and is measured diagonally.



Display quality – This is the resolution of the screen or the number of pixels (picture elements) it has. The higher the resolution, the better the quality of the image and the more you can clearly see on the screen at once. The following pictures are exaggerated but show the idea...



High resolution



Low resolution

Processor

The Central Processor Unit (CPU or processor) is the “brain” of the laptop. The speed and design of this has an impact on the laptop’s performance. For general use, most CPUs will be adequate.

Storage

Storage (think long-term memory) is provided by what is called a drive. Your laptop’s operating system (Windows 10), your apps (Word, Excel, Chrome browser, Zoom, etc) and your personal data (documents, photos, etc) are stored on this. So long as you save your work it will be stored even when the laptop is switched off.

Until recently, most computers used mechanical hard disk drives (HDD) for storage. Now, many laptops are available with Solid State Drives (SSD). While these are currently more expensive (per amount of storage) they are much faster. The Windows 10 operating system uses a lot of the computer’s resources and an SSD will greatly improve performance. This means you are less likely to want to throw the laptop out of the window when you’re fed up waiting for it!

NOTE: We would consider an SSD essential for a Windows 10 laptop.

Most users will be fine with a 120GB (Giga Byte) SSD. However, if you want to store thousands of photos, videos or music files, you may need a larger one, which will increase the cost of the laptop. An alternative is to buy an external, HDD for this data. These are fairly cheap and it means you have the benefit of the fast SSD to run the operating system and the large (cheap) storage capacity of the HDD. Some laptops even come with both an SSD and HDD built-in. Another option would be to save your personal data to the Cloud. Windows 10 comes complete with 5GB of free storage in OneDrive and you can pay for more if required.

To give you a rough idea of how much storage you’ll need...

1 byte is what it takes to store one letter.

The word **SeniorNet** has 9 letters so takes 9 bytes

- 1000 bytes = 1 kilobyte (kB) - 1,000
- 1000 kilobytes = 1 megabyte (MB) - 1,000,000
- 1000 megabytes = 1 gigabyte (GB) - 1,000,000,000
- 1000 gigabytes = 1 terabyte (TB) - 1,000,000,000,000

Actually, 1kB equals 1024 bytes but it’s commonly rounded to 1000. Very roughly, 1GB will store;

- between 150 and 400 photos
- around 15 minutes of high definition video
- around 16 hours of music

Memory

Random Access Memory (RAM) can be thought of a short-term memory. It is used by the laptop while it is switched on. If you're writing a document it will be in the RAM. If you switch off the laptop, without saving your document, it will be lost forever. In other words, RAM gets amnesia when you switch it off.

You need a reasonable amount of RAM for Windows 10 to run smoothly. You certainly need **no less than 4GB**.

Other considerations

Applications – many people are familiar with applications contained within Microsoft Office. These include Word, Excel, PowerPoint, Outlook, etc. Microsoft Office is not free, though many laptop specifications may imply that it is already installed. It is, but only for a short-term trial - you will need to buy it. These days, most people pay a subscription rather than buy a physical item. This ensures that you always have the latest version. Currently Microsoft 365 Personal costs \$119 per year.

Anti-virus – It is essential that you have anti-virus software installed on your laptop. However, you **do not need to buy** anything – no matter what the salesperson tells you! Windows 10 comes with Windows Defender built-in and this is as good as anything else currently available.

Specifications

Below is part of the specification of a typical, home use laptop.

OVERVIEW ▾	SPECIFICATIONS ▲	REVIEWS ▾
SPECIFICATIONS		
Brand/Model: HP 15.6" AMD A9 4GB RAM 256GB SSD + 1TB HDD Laptop (15-db0072ax)		
Processor: AMD A9-9425 Dual-Core (3.1 GHz base frequency, up to 3.7 GHz burst frequency, 1 MB cache)		
Memory: 8 GB DDR4-1866 SDRAM (1 x 8 GB)		
Storage: 256GB PCIe® NVMe M.2 SSD + 1 TB 5400 rpm SATA		
Display: 15.6" diagonal HD SVA BrightView WLED-backlit (1366 x 768)		
Webcam: HP TrueVision HD Camera with integrated digital microphone		
Software: Windows 10 Home 64		

This model has an AMD CPU, 8GB of RAM, a 256GB SSD plus a 1TB HDD and a 15.6" display with a 1366 x 768 pixel resolution. It comes with Windows 10 Home edition already installed.

More Information

If you want more in-depth information, check this [article](#) from Lifewire which covers not just Windows laptops.