Title:
Guide to Buying a Laptop Computer

Word Count:
1287

Summary:
With the many different brands and models on the market, buying a laptop or notebook computer may at first seem confusing...

Keywords:
Laptop, notebook

Article Body:
With the many different brands and models on the market, buying a laptop or notebook computer may at first seem confusing. But simply breaking down the process into a few key areas and using Myshopping.com.au to search for the most suitable features and pricing makes it much easier to access exactly the machine you're looking for.

How important to you is mobility?

Mobility in laptop computers is a combination of size, weight and battery life: how often you carry it around, and if you will be relying mainly on the notebook's battery, or whether you will access an external power source. Laptops can weigh from a little over 1 kg up to 6kg, depending on the model and features included. The screen, storage space and disc drive all affect the weight.

Battery life is shortened by bigger screens and multiple disc drives. Manufacturers advertise the weight of the laptop in their specifications, but it is important to consider whether that specification includes batteries and other peripherals such as external drives that you may be lugging around. The most common battery type is Lithium Ion (Li-Ion), which can operate for one to three hours under normal working conditions. But many power saving options available and higher celled batteries can extend the discharge time considerably. Battery life deteriorates over time however, and as your laptop ages; the discharge rate of the battery will diminish. Sometimes it is worthwhile carrying an additional battery.

Application and cost

If mobility is of a lesser concern, then battery life and weight will be less

important. You may be more inclined to have a bigger processor, screen size and memory capacity. The type of work you do can affect the screen size and type that is most suitable for you. For a lighter load, and less graphics intensive applications a 12-14in screen instead of 15 or 17in widescreen will be more suitable. If, on the other hand, the graphics capabilities and size of the screen are important then the best screen you can afford will be more of a priority. It may work out cheaper to buy a basic unit and add such things as an external TV card and DVD burner when the need arises.

How much you need to spend is closely related to how you use your laptop. If you only want to access your e-mail, browse the Web and do word processing, then you can consider lower budget machines with smaller processors, screens and facilities.

A medium-level user, perhaps playing games or working in multimedia applications, will need a powerful processor, graphics controller, storage space, and a bigger screen. The more features your laptop has, the more expensive it will be. Including a DVD-burner instead of DVD-ROM, hard drive capacity of more than 40GB, a 17in widescreen screen and wireless capabilities results in a more expensive machine.

If you are not looking for high power and graphics capabilities, then you may find a suitable laptop for around $1500. The latest processor, full blown graphics capability, DVD burner, widescreen and wireless connectivity may cost over $4000. Use Myshopping.com.au to search with different price ranges.

Other key components

Having determined by what you will do with it, and how mobile you need to be that you are definitely buying a laptop, you now need to get down to the nitty gritty and find the specifications that will meet your needs. So, what to look for? Essentially, you are considering differences between the following components: display, graphics controller, memory (RAM), hard disk, removable storage, networking options, peripheral connectivity, sound and battery.

Display and Graphics

Notebooks now all feature LCD screens (Liquid Crystal Displays) presenting crisp text and reduced eyestrain. These screens display sharper text than standard CRT monitors, but are less capable of displaying well-rendered graphics. If you will be using your notebook for graphics work, it may be worthwhile having a CRT monitor to connect to. Screen sizes for notebooks range from 12.1in to 17in (widescreen). A 15in display or 15.4in widescreen alternative is the most common

in notebooks today. Widescreen is quickly becoming more common, partly to accommodate playback of DVDs and also because widescreen proportions make it is more durable.

On-screen graphics are affected by both the size and type of screen as well as the graphics card. It is reasonably safe to assume that larger displays offer higher on-screen resolution. Screen brightness (measured in nits) is another specification that can vary between makes and models. Brighter screens impact less on eyes and can be more easily read in bright conditions. Some manufacturers have a glossy, reflective coating over the display improving contrast and colours. But, because it increases the reflectivity of the screen, it can show you reflected in the screen. Surface scratches may also show up more readily. Not all LCD screens have the same viewable angle, with some screens not easily viewed from a side angle.

Graphics performance in laptops is still inferior to that of desktop machines. All graphic controllers easily render 2-D images and if you don't need more from your graphics, then an integrated graphics controller is ample. However, if you want to play the latest 3-D games at a decent resolution and frame rate or you're a CAD designer, then you'll need a discreet graphics controller with a dedicated DDR video memory.

Memory and Storage

In all computers RAM chips keep the CPU efficiently fed with data or instructions from programs on the hard drive. Notebook computers now commonly use DDR SDRAM (Double Date Rate SDRAM), the default standard, and DDR2 SDRAM which is a next-generation memory type offering considerable performance and power benefits over SDRAM. Either way, when it comes to RAM, more memory is better and you should consider 256MB as the absolute minimum. Upgrading memory can achieve better performance, and quite a number of vendors offer higher RAM configurations as a 'deal sweetener' at the time of purchase. Search through Myshopping.com.au for bundled extras such as more RAM.

The hard drive provides the long-term storage and is the centre of program control. There are two critical specifications of hard disks. One is disk speed, measured in revolutions per minute (rpm). Faster disks speeds provide quicker access for loading and saving and 'file swapping'. The other is storage capacity, and drives are now available for notebook computers with 120GB capacity. If you work with large file sizes, then you will probably want at least 40GB of hard drive space. You may also want to consider the type of removable storage such as a DVD writer, removable hard disks and media or 'flash' card systems that will suit your use best.

Networking and connectivity

Laptop computers now include 56Kbps modem (RJ-11) and 10/100 Ethernet (RJ-45) connections as standard features. Some feature an Infrared port and you can use it to connect your mobile phone. Other wireless technology for connecting mobile phones, printers and PDA devices includes Bluetooth and Wi-Fi, allowing connection at certified public access points and home wireless networking. Most laptops use USB 2.0 or FireWire connection for connecting keyboard, mouse, printers, cameras and other peripherals. Nearly every new notebook will have around three USB 2.0 ports, and one FireWire port and a VGA-out port to connect an external monitor to.

Notebook computers have traditionally been able to expand their capability through simple plug-in PC Cards. Recently a new standard has emerged called ExpressCard, a smaller, faster and more portable plug-in card to provide such things as expanded video and sound capacity.

Choosing a laptop becomes much easier once you've decided on these basic requirements. You can search Myshopping.com.au to compare makes, models, prices, accessories and all the important specifications. You can also compare vendors and their prices and service.