

Buying a truly portable laptop computer



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1. Introduction

"I need to replace my laptop, what do you suggest?" This is a common question we get asked. Unfortunately there is no simple answer we can offer - everyone is different and the nature of your practice Civil, Criminal or Family as well as your budget has a bearing on what we might suggest. This short guide looks at what you need to know when buying a laptop computer for use on the move. We also offer a few recommended systems and some do's and don'ts to follow if you decide to handle the purchase yourself. We can also tell you of others in Chambers who have similar PCs so you can get their opinion and see the prospective machine.

2. All PCs are not the same

Gone are the days when a portable computer meant lugging around something the size (and weight) of a sewing machine. Fully featured laptop PCs are now available that are little bigger than an A5 notebook.

When looking for any PC, bear in mind you will need to make compromises somewhere along the way. The lightest laptops will tend to be more expensive, slower and have poorer battery life whilst a bigger laptop may be faster but also heavier. Before looking for a new PC, first be clear of what your particular priorities and needs are.

3. Ultra-portable Laptops

Whether you are Criminal Barrister, pupil or have a heavily court-based practice you will typically be looking for a very portable or "ultra portable" type of laptop. Some things to consider when looking for an ultra portable laptop are:

- a) **Size** – Ultra portable laptops will usually be about the size of a piece of A4 paper and about 1" thick. The size of the keys on the keyboard also tends to be smaller making them uncomfortable to use for long periods. An external keyboard and mouse can always be connected.
- b) **Weight** – Typically, such laptops weigh between 1 and 1.75kg with the very lightest being eye watering expensive. Aim for something around 1.5kg. To keep the weight down, almost all laptops of this kind have their CD/DVD drives as external devices and you only connect them when needed. You can also keep the weight down further by buying two power adaptors keeping one in Chambers and one at home.
- c) **Screen size** – The 12" screen is the standard size in this class of laptop. Like the keyboard, using laptops with small screens can be tiring and also limiting if you are working with large spreadsheets. Connecting an external display in place of or to supplement the internal screen will help but budget for another £150.
- d) **Battery life** – What the manufacturer says and what you really get are, as usual, different. Typically you will get at least 2-3 hours from a new fully charged battery. Looking after the battery will ensure it lasts longer but usually after 2 years the ability to hold a charge drops significantly. You may want to consider buying a second battery. This will stop you getting caught short if you if you are on a long trip.
- e) **Communications** – Most laptops now include network and modem connections as standard. Wireless networks are becoming more common so your choice should include wireless capability. If you want to access the Internet and E-mail on the move through your phone then integrated Bluetooth is also recommended.

4. Software not included

Unless you buy your PC directly from the manufacturer, for example Dell, the price you see is unlikely to include the Microsoft Office software. Manufacturers and some stores will offer to include the software at a reduced price compared to the usual shelf price. This reduction, typically half-price, comes with the restriction that the software is tied to that machine and that machine only – you cannot transfer it to another machine at a later date.

5. What to look for

a. Minimum specification

Processor	Intel® Pentium® M 1.5GHz or greater
RAM	512MB
Hard Disk	40Gb
Optical Drive	CD-RW/DVD Combo
LAN/Modem	Yes
Wireless	Yes - 802.11g

- b) **Windows XP Professional** – To make your life easier when using your PC to access the Chambers network make sure that the PC has Windows XP Professional rather than Windows XP Home. Although PCs with XP Home will typically be around £50 cheaper, upgrading to XP Professional later will cost £150.
- c) **Microsoft Office 2003** – The Small Business Edition version of Office 2003 is recommended and includes; Word, Excel, PowerPoint & Publisher. Cost is £150 if bought with the PC and £300 if bought off the shelf. If there is the need to process large amounts of data quickly then Office Professional which includes the Microsoft Access database application is recommended.
- d) **Warranty** – Ask what happens when things go wrong, who do you contact, what do they do, does the PC have to be sent back (leaving you "stranded"), how long does the warranty last and how long does it take to get fixed. We always recommend you get a three year warranty when buying a laptop as the components are expensive.
- e) **Avoid** - Windows XP Home, Pentium 4 processors in small laptops and anything that doesn't feel "solid".

6. Where to buy

Tottenham Court Road or PC World are the usual places to go but don't buy on your first visit, go over the topics above and ask us to check prices and specifications. John Lewis is also good but the range can be limited. Online prices are competitive and manufacturers such as Dell will make your PC to order but you will have to wait a couple of weeks at most for it to arrive.

7. Our Recommendations

The following recommendations are based on our experience of a particular model, manufacturer or reviews we have come across. Prices given exclude VAT and the Office software.

- **Acer Travelmate 382TMI** – At 1.6kg and £950 this laptop is great value for money. Includes a DVD writer and has superb battery life (3½ hours) but no built-in Bluetooth.
- **Samsung X10plus LTC 735** – Although it weighs 1.9kg, the screen is 14" and it has a built-in CD-RW/DVD drive. Cost is £1,200 with the battery life of around 3 hours.
- **Others to consider** – Dell Latitude X300, Toshiba Portégé R100 & Sony Vaio VGN-S2XP.



Processor

This is the "engine" of the computer. The speed is usually described in terms of "Gigahertz or GHz" with bigger not necessarily meaning better. Two brands of processor dominate the market, Intel and AMD. Intel processors are more expensive and innovative whilst AMD processors are cheaper and slightly less capable. There are also different models of processor to suit different types of PC. Pentium 4 processors are better suited to desktops where lots of speed might be needed. For laptops, Intel M (Mobile) processors are designed to conserve battery power more efficiently.

RAM

This is the "memory" or working area of the PC. RAM is comparable to the number of seats in your car. The more seats you have the more passengers (or applications) you can have working together at any one time. There also different types of RAM for example SDRAM and DDR. All do the same thing but one type may be slightly faster than another or include features to deal with faults that may develop later.

Hard Disk

This is the storage area of the PC. Also known as a hard drive and fixed disk, the hard disk is akin to the boot of your car. The bigger your boot the more you can store. The capacity of a hard disk is usually measured in "GB's or Gigabytes". Hard Disks also operate at different speeds, typically 5,400 or 7,200 rpm. The faster the disk the quicker it can retrieve information but faster hard disks will be slightly more expensive.

Graphics Card

Your PC has components dedicated to displaying information on its screen. The graphics capability of the PC is usually indicated by the amount of memory the card has. The more memory the card has, the greater the quality of the picture it is capable of producing – what is used to display the picture must match it to get the best results. Instead of having their own dedicated memory, some graphics cards use a portion of the PC's RAM. For day to day working this is fine but if you want to manipulate pictures and video or play computer games a dedicated graphics card with at least 64MB of memory and its own processor is needed.

CD-RW

Most PCs will be supplied with at least a CD-ROM drive. A CD-RW (CD-Read/Write) drive is capable of both reading CD-ROMs and creating them. CDs can usually store about 750MB of information. This is equivalent to around 20,000 Microsoft Word documents, 700 digital photographs and 200 music tracks. Creating CDs is not like using floppy disks or memory sticks. You choose what you want to add to the CD and the PC then "burns" the information on to it – a process which can take several minutes.

DVD

Increasingly PCs are supplied with a DVD drive as standard. A DVD drive is capable of not only reading and playing DVDs but also reading and playing CDs. If you are interested in making DVDs of your home movies, you can buy a DVD writer which will create both DVDs and CDs. A DVD will typically hold 4.7GB of information although 9GB devices are starting to become available. If you are buying a DVD writer make sure it can write DVD+RW and DVD-RW type DVDs otherwise the DVD may not play properly in your DVD player or on another PC.

Memory Stick

Also known as **USB Flash Drives**, this form of storage is becoming increasingly popular and is replacing the need for floppy drives. A memory stick is usually a thumb sized device that connects to the USB port of your PC. You can transfer files to and from a memory stick as you would a floppy but the storage capacity is far greater. The storage capacity of a memory stick is usually measured in Megabytes (MB) and a 128MB memory stick will store 3,500 Microsoft Word documents, 128 digital photographs and 35 music tracks.

USB

Is a type of connection used for linking printers, scanners, music players, memory keys and a variety of other devices to your PC. Every PC comes now comes with USB ports, usually there will be a couple at the front of the PC and several at the back. USB 2.0 capable devices transmit information faster than 1.1 devices providing that your PC also has USB 2.0 ports.

Firewire

Is a type of connection used for linking digital video cameras and music players to your PC. Although Firewire is faster than USB the range of devices that use it is more limited. Firewire ports are usually found on Apple Mac PCs and Windows PCs tailored for "multi-media" use however it can be added later if needed.

Wireless

Is a technology that allows your PC to access services such as the Internet, printers and other PCs without having to connect a cable to your PC. Most laptops now come with wireless capability and providing you are within a short distance (about 20m) of a Wireless Access Point, you can, if allowed by the operator, make use of its services. There are a variety of different wireless standards known by their letters "a", "b" and "g". Those that operate to the "g" standard are the fastest and some devices can only talk to other similar devices whilst others will talk to any other device. Wireless networks broadcast information so it is important that all the security features they offer are used.

Bluetooth

This is another form of wireless technology that operates over much shorter distances (less than 10m) and at slower speeds. Bluetooth is typically used to allow one device to access the features or services of another. For example, a laptop could use a Bluetooth connection to transfer the address book from your mobile phone or to make a call giving it Internet access. Many laptops include Bluetooth capability or it can be added using a USB device costing around £20.

Megabyte (MB)

A unit of storage for a PC. The size of the RAM in a PC and memory sticks are usually quoted in "MB's", 1Mb will store about 30 word documents and 1 digital photograph.

Gigabyte (GB)

A unit of storage for a PC and 1GB is equal to 1,000MB. The storage capacity of the hard disk in a PC is usually quoted in "GB's". 1GB will store around 30,000 Microsoft Word documents, 1,000 digital photographs and 300 music tracks.

Approximate storage capacities of different devices	Word Documents	Photographs	Music
Memory Stick (128MB)	3,500	128	35
CD (700MB)	20,000	700	200
Hard Disk (40GB)	115,000	40,000	11,000
1MB	30	1	-

1GB	30,000	1,000	300
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