



## this issue

What is a PC? **P.1**

Desktop Computers **P.2**

Mobile Computers **P.3**

Handheld Computers **P.4**

## What is a PC?

What is a PC? Well the simple answer is what is listed in the dictionary which is “Personal Computer”.

A great description of what a PC is can be found on Wikipedia which states

“A personal computer (PC) is a general-purpose computer, whose size, capabilities, and original sale price makes it useful for individuals, and which is intended to be operated directly by an end-user with no intervening computer operator.”

So how does all this translate to what you can purchase on the market today from all the various manufactures that there are. At a very high level the first thing most people do is choose their operating system / platform

which is normally between Microsoft Windows or Apple Mac OS, but that is for another article at some point, In this article we are going to cover the type of hardware / device type.

If we look at PC being the main category, through this article we are going to break this category into sub groups and devices to try and help you navigate you're through the possible options you have to meet your needs.



## Desktop Computers



Shapes and sizes of desktop computers have changed over the years but we now seem to have a standard set across most manufactures like Dell, Lenovo etc...

These models are: -

- MT – Mini Tower
- DT – Desktop
- SFF – Small Form Factor
- USFF – Ultra Small Form Factor

Mini Towers is the traditional style of computer most people are used to but as time is moving Desktop & Small Form Factor are becoming more and more popular due to spare saving on desks and in homes.

There are other types of cases from “cubes” to hi fi style and more.

One thing to be warned about with smaller cases or integrated systems is that replacement parts could be harder to get, or if you need to add expansion cards you might have to get special sized ones not standard sizes.



The final style of desktop computer type is the “All-In-One” otherwise known as the AIO.

Apple where the first major PC manufacture to make an AIO with the eMac/iMac which was a CRT monitor with the PC built into the base of the monitor.



Over the years and as technology has improved, these have evolved into LCD & touch screen which other manufactures have also started to release.

These All-In-One computers are very similar to the technology used in laptops and can include such features like wireless, Bluetooth and more.



### Dell AIO

Picture of the back of a Dell LCD All-In-One PC showing where all the ports are located.



# Mobile Computers



Mobile computers is a very wide and sometimes misunderstood category of devices due to different naming conventions of the years by manufactures.

You might well have heard of the terms pad, slate, tablet, netbook, notebook and many many more! But we during this article are going to reduce this list dramatically as most of the terms are for the same devices.

Through this article we are going to describe the following devices: -

- Laptop
- Convertible
- Tablet
- Slate

## Laptop

A laptop is a portable personal computer with a clamshell form factor, suitable for mobile use. A laptop has most of the same components as a desktop computer, including a display, a keyboard, a pointing device such as a touchpad (also known as a trackpad) and/or a pointing stick, and speakers into a single unit. A laptop is powered by mains electricity via an AC adapter, and can be used away from an outlet using a rechargeable battery. Laptops are also sometimes called notebook computers or notebooks. Most of the modern day laptop computers also have a webcam and a mic (microphone) pre-installed.

Some suppliers and manufactures have laptop as the root category but I feel it has earned its place as a device.

## Convertible

A convertible is a type of laptop that changes or “converts” into a tablet or slate device. People also call this a hybrid device as it a combination of two types.

Convertibles generally come in two flavours of converting, one where the display and keyboard detach and the other where the screen either twists or folds flat.

## Tablet

A tablet computer, or simply tablet, is a mobile computer with display, circuitry and battery in a single unit. Tablets are often equipped with sensors, including cameras, microphone, accelerometer and touchscreen, with finger & stylus gestures replacing computer mouse and keyboard. Tablets may include physical buttons, e.g., to control basic features such as speaker volume and power and ports for network communications and to charge the battery. An on-screen, popup virtual keyboard is usually used for typing

## Slate

A slate is very similar to a tablet but differs in the following ways: -

- No stylus for interaction (sometimes finger replacement stylus can be used but these do not enable writing etc)
- Usage, a slate is designed to be quick and easy to use with the main purpose of browsing / consuming data like web pages, books etc...

A good example of a slate device is Apple's iPad or Amazon's Kindle

## Mobile Computer Images



## Handheld Computers

This is an interesting category of devices as it changing dramatically and might even disappear over time.

Traditionally this category of devices was aimed at the various types of personal digital assistants (PDA's) that existing from Microsoft Windows CE, Palm OS and more.

Personal digital assistant (PDA) devices provides the appointment calendar functions usual for any PDA.

A typical PDA has a touchscreen for entering data, a memory card slot for data storage, and IrDA, Bluetooth and/or Wi-Fi. However, some PDAs may not have a touch screen, using softkeys, a directional pad, and a numeric keypad or a thumb keyboard for input; this is typically seen on telephones that are incidentally PDAs.



In order to have the functions expected of a PDA, a device's software typically includes

- an appointment calendar
- a to-do list
- an address book for contacts
- a calculator
- and some sort of memo (or "note") program.
- PDAs with wireless data connections also typically include an email client and a Web browser.

PDAs are largely considered obsolete with the widespread adoption of smartphones.



A smartphone, or smart phone, is a mobile phone built on a mobile operating system, with more advanced computing capability and connectivity than a feature phone.

The first smartphones combined the functions of a personal digital assistant (PDA) with a mobile phone.

Later models added the functionality of portable media players, low-end compact digital cameras, pocket video cameras, and GPS navigation units to form one multi-use device.

Many modern smartphones also include high-resolution touchscreens and web browsers that display standard web pages as well as mobile-optimized sites.

In recent years, the rapid development of mobile app markets and of mobile commerce have been drivers of smartphone adoption.

The adoption of these smartphones have revolutionised who has access to PDA functionality while reducing the number of devices you have to maintain.

We at Strobe IT hope this article has been a useful guide in the world of computers.

*Robin Toy*

robin@strobe-it.co.uk

strobe IT  
2fl 0pe IT