BUYING A Notebook or Tablet?

READ THIS FIRST !

BUYER BEWARE: There are 2 different Portable Computer designs for 2 different uses….

Home (Retail) Grade and Business(Commercial) Grade Home Grade portables are designed to provide the most power for the lowest price whereas Business Grade focuses on power combined with strength and reliability reducing ongoing costs, limiting repair downtime and providing better Data protection and security. Commercial Grade portables are built stronger, minimise heat/dust production, have enhanced security/interface options and usually have much longer battery replacement life. Retail Grade portables are designed for occasional mobility, Commercial Grade are for regular portability with a focus on reducing need for repair.

Commercial (Business) Grade portables have a variety of design improvements over Retail Grade such as HDD drop protection, water resistant keyboards, extended temperature range, toughened hinges, crack resistance, impact resistance, Scratch resistance, Security hardware and software, dust protection along with advanced interfaces such as Smartcard, Mil Spec, 3/4G, Bluetooth, Replicator/Docking support and replaceable Drive bays. Thus if you are a student or mobile professional, Commercial grade is the best option as you are more assured of long life with less issues. A recent study showed Home Grade notebooks used in a Business Grade environment can have failure rates 50% to 100% higher than Business Grade Notebooks per year. If you ever use a portable outside the Home, Business Grade is the best long term recommendation.

Notebook vs Tablet: Touch screen based Tablet computers come in many shapes and sizes along with different performance abilities. Windows 8 allows a Tablet computer to provide an ease of use touch screen interface combined with the multitasking, multi-window compatibility, power and security of the regular Windows desktop. A Notebook or Laptop computer has the keyboard attached to the screen and is more sturdy.

Celeron Dual Core/Pentium Dual Core/Core i series : A clever, power conserving design that runs at slower clock speeds whilst providing high speed and low heat. The best CPU for portable use. The dual core processors actually have 2 CPU cores that can make up to an 80% multitasking improvement. The Core i series is fastest and the best choice for the future. The Core i7 quad series (overclocking 6mb cache) has 4 CPU cores that provide high multitasking speed and is highly recommended for video editing purposes but has reduced battery life. The high speed dual core i3 (no overclocking 3mb cache), dual core i5 (overclocking 3mb cache) and dual core i7 (overclocking 4mb cache) are also available & highly recommended.

Intel Atom/AMD Fusion: These are among the slowest CPU's available and are approximately half the speed of a the most basic Intel Celeron CPU.

Which is best ?: The Intel dual core Celeron, Dual core Pentium and Core i series are a marvel of processor design, combining multiple CPU cores providing excellent multitasking performance and is the best choice for notebook use. The Core i7 CPU with 4 CPU cores is for even higher performance for certain multithreaded applications such as video authoring. Choose the dual core i3/i5/i7 for best overall performance and battery life followed by the Pentium and the Celeron due to lower cost. The Intel Atom and AMD Fusion CPU are only recommended for basic internet use.

TURBO BOOST ? This is a clever way of dynamically speeding up a CPU core when other cores are unused. Only with Intel Core i5 and Core i7.

BUYER BEWARE: The clock speed of the microprocessor (CPU) does not necessarily translate to the performance level of the computer system. Poor video design, hard disk, cache design/size, bus and memory sub-systems can reduce overall performance as much as 50%. Do not fall for the concept that the higher the clock speed, the faster the computer. Also note the faster the speed, the shorter the battery life. A new deception is to provide a high speed CPU with a low speed graphics chip and/or hard disk , eliminating any overall speed advantages. Don't be caught with less than you paid for. Check with a supplier that can do benchmark comparisons. – Now more important than ever !

BUYER BEWARE BATTERY LIFE: Many portables provide as little as half the battery life that their manufacturers state. Ask for benchmark tests.

WXGA vs WSXGA+ vs Full HD/4K2K: Instead of the screen resolution being WSXGA 1366*768, they have been improved to WSXGA+1600*900 and 1920x1080 and beyond. The higher resolution provides more displayable information than the regular XGA screens. This means more of your spreadsheet, documents and graphics will be displayed on screen. Be aware that the increase in number of pixels results in smaller image size. Make sure your graphics adapter has 512MB discrete video memory or better. 3D graphic accelerators vary in greatly in speed – as an example: a discrete ATi 8750m is roughly double the speed of an ATi 8550m , which, in turn, is double the speed of an integrated fully shared graphics accelerator like the Intel HD4000. The correct choice of graphics card is critical for 3D modelling work and games – mobile graphic cards cannot be upgraded –choose the fastest graphics accelerator you can afford for future software support and performance but be aware the faster the graphics the lower the battery life. Always see if there are benchmark comparisons as this is a major area of confusion.

DVD Burner vs Bluray : A DVD drive reads and creates CD and DVD disks. These are available in capacities up to 8.5GB. The new Bluray drives are backward compatible with DVD and can create 50GB disks. These larger capacities are great for backups and HiDef movies. Be aware that Bluray drives are available as read only and read/write, with the read/write type considerably more expensive.Get Bluray combo drive to be future proofed.

Hard disk drive speed :. Most notebook computers use a 5400rpm speed. 7200rpm drives can be 50% faster. SSD drives have no moving parts and are faster, however they much more expensive and compared to a regular hard disk drive but are highly recommended. There are now hybrid hard drives available which combine and hard disk drive and a small amount of SSD to enhance speed but are still slower than a pure SSD drive.

Bluetooth: A radio based interface standard for communicating with devices in close proximity - within 5 meters. Useful for mobile phone connection.

Wifi Wireless a/b/g/n AC: A new radio standard for connection computer networks without cables – high speed - superiour to Bluetooth – 300M range The new WiFi AC standard allows for much higher speeds and more users than any of the previous standards – Highly Recommended

USB 2/3 & Firewire 1/2 : These are new serial based high speed interfaces to replace the old RS232 serial standard. Firewire and USB 2/3 are particularly suited to video movie capture. These interfaces allow for several devices to be 'daisy chained' together. USB 3 is 10x faster than USB 2.

WARRANTY: The standard Warranty period is 1 year. Notebooks have higher failure rates than desktops due to their portability and warranty extensions can protect your investment. The higher the warranty period the better as notebooks can be very expensive to repair.

Insist on Support: Portable computers contain leading edge technologies. Check that your supplier can provide knowledgeable and experienced advice as there are usually more idiosyncrasies with notebook designs than desktops. PCMCIA, ExpressCard, TPM, Bluetooth, S/PDIF, SpeedStep, USB3, DVD+-RAM DL, Blu-ray, Wifi a/b/g/n, Cardbus, PATA, eSATA, power management, HDMi, Displayport, Firewire, 3D accelerators, CPU upgrades, docking station and LCD screens require specialized knowledge and support. Suppliers that locally specialize in notebook computer sales, service and support are the best recommendation, as this can speed up repairs and support considerably as portables DO fail due to their mobility. …. And remember, if you don't recognize the notebook brand – BEWARE of reliability and long term parts availability issues Support and service is vital to the successful long term operation of a portable computer – never purchase a portable based on price alone