



Power notebook Hi-Grade Ultinote M6600-2500



Hi-Grade Ultinote M6600-2500

- ☐ Hi-Grade: 020 8532 9100
- ☐ www.higrade.com
- ☐ £1,599 ex VAT

Specifications

2.5GHz Mobile Pentium 4; Windows XP Home; 512MB DDR RAM; 60GB hard drive; GeForce4 440 Go; 15in TFT max res 1,400x1,050; CD-RW/DVD-R combo drive; 3.4kg; 331x284x47mm; 3-year warranty

Build quality



Features



Value for money



Centrino may be the focus of Intel's current marketing push, but there's still room in its heart for the trusty Pentium 4 Mobile processor.

Hi-Grade has built the Ultinote M6600-2500 around Intel's P4 2.5GHz chip. Rather than compromise on the quality of the other components and keep the price down, Hi-Grade has created a notebook that has it all. At £1,599 ex VAT the Ultinote's expensive, but you get what you pay for.

Its WorldBench 4 score of 121 is a few points behind the record-breaking Acer TravelMate 800 (see the May 03 issue), which uses a 1.6GHz Pentium M (Centrino) processor, but it's still an impressive performance score.

CD-RW drives have become commonplace in notebooks, so Hi-Grade has gone a step further and provided a CD-RW/DVD-R combo drive. Capable of 16/10-speed (write/rewrite) rates to CDs and single-speed writing to DVD-R and DVD-RWs, the Toshiba drive provides excellent backup options.

The 15in screen offers a sharp display and this is used to good effect by the



64MB GeForce4 440 Go graphics card. Though gamers generally tend to use desktop systems they wouldn't be disappointed by the Hi-Grade – it achieved frame rates of 73.2fps (frames per second) when running the Quake III Annihilator demo at a resolution of 1,024x768.

Hi-Grade has also included Wi-Fi facilities which means you can easily hook up to the office network provided wireless capabilities are supported.

Verdict

We would have liked the Ultinote to come with a floppy drive and, at 3.4kg, it's also not the lightest model on the market. These are minor quibbles, though, and do not detract from the overall quality. There's life in the Pentium 4 Mobile processor yet. ■

Ben Camm-Jones



Power notebook Dell Inspiron 8500

The Inspiron 8500 is a striking notebook, not least because of its massive footprint. Its larger-than-average size is down to one of the 8500's key selling points: its widescreen 15.4in TFT display, which is capable of a top resolution of 1,920x1,200. This impressive support makes it ideal for its target market of multimedia-hungry movie fans. DVD images are crisp, clear, smooth and fit easily on the screen.

The number of hotspots (public areas where you can connect to a wireless network) is growing and more offices and homes are adopting cable-free technology. Dell is ahead of the masses, offering built-in 802.11b and g antennas. This means the 8500 will be upgradeable to support both existing wireless networks and the faster 'g' standard as it is introduced.

Graphics are expertly rendered by a 64MB GeForce 4 4200 Go card. Storage is provided by a 40GB hard drive while backup is handled by a combo DVD/CD-RW drive. But in line with Dell's new strategy no floppy drive is included.

Combined with a 2.4GHz Mobile Pentium 4 processor and 512MB of DDR RAM, the Inspiron

achieved a WorldBench score of 106 running at the native resolution of 1,920x1,200. Dropping the resolution to 1,024x768 meant the Dell managed a faster score of 113.

Dell is offering customers the option to customise their notebook with different coloured shells, ranging from the olde-worlde Burlwood to the frankly foul red lava. Even if you opt to stick with the standard silver-grey case, the 8500 is a good-looking model with blue accents around the keyboard and an attractive two-tone lid.

Verdict

The 8500 is a sleek performer that's ideal for power users. The warranty offers an impressive three-year onsite international cover, although if money is tight you can cut £200 off the price by opting for a one-year collect-and-return warranty. ■

Ursula Seymour



Dell Inspiron 8500

- ☐ Dell: 0870 152 4699
- ☐ www.dell.co.uk
- ☐ £1,699 ex VAT

Specifications

2.4GHz Mobile Pentium 4; Windows XP Home; 512MB DDR RAM; 40GB hard drive; GeForce 4 4200 Go; 15.4in TFT; max res 1,920x1,200; built-in 802.11b & g; combo 8x/24x/24x/10x DVD/CD-RW drive; 3-year warranty

Build quality



Features



Value for money



Smart display ViewSonic Airpanel V150

If you like to show off your holiday snaps in style then a smart display could be an ideal investment. The Airpanel V150 is a wireless flat-panel screen about the size of an A4 notepad that you can pick up and use around your home.

Place the screen somewhere central, pull out its vertical stand and treat your friends to a slideshow of digital photos. It displays whatever's currently on your PC's screen, even if your system is hidden away in a spare bedroom while you're entertaining in the lounge.

With the V150's operational range of up to 100ft, you can check your email while sitting at the kitchen breakfast bar or surf the web while slumped in front of the TV.

Keep under control

You'll guess from the £850 ex VAT price tag that the Airpanel is no ordinary screen and does more than emulate your PC's visual display via a Wi-Fi connection. You can control your PC from the screen using a stylus to navigate the 15in touch-sensitive panel. It is essentially a thin client – that is, it stores no data but has a low-powered processor to access information from and upload it to your desktop PC.

But it requires Windows XP Pro edition to work and, as the OS is included in the package, the Airpanel's price tag is high for a monitor.

There's no need to worry about security, though. When the V150 is used in wireless mode the main PC screen is automatically locked, so no one can get their hands on your valuable data except by entering the network or your local password.

You can press the keyboard function button on the righthand side of the Airpanel's frame to bring up a virtual keyboard or switch to handwriting-recognition mode and enter data this way. Files and folders are opened by double-clicking them with the stylus which protrudes perpendicular from a recess.

Alternatively, for safekeeping you can tether your stylus to a clip on the top right of the casing – not ideal for lefthanders as the retaining cord is too short.

No playing allowed

Batteries powering the 400MHz Intel XScale processor last for up to five hours, though sending lots of graphics data over the 802.11b wireless connection will obviously require more juice than writing memos and reading emails.

We had no problem playing simple Flash-based web games but the 11Mbps (megabits per second) data transfer rate means it's not up to gaming or streaming video. Once faster wireless data transfer protocols are agreed, second- and third-generation smart displays are sure to be preconfigured for such uses.

The ViewSonic's rugged frame means it won't be scratched or damaged easily, but carry this 2.6kg screen around for a while and you'll soon notice its weight.

Basic connection, volume level and other onscreen controls can be accessed from the taskbar running along the screen's lower edge, but there's no one-touch access to brightness or contrast buttons. When used as a main screen, we also found the connection imperfect and colours and image definition occasionally went awry.

Verdict

The Airpanel is a solid, bright flat-panel screen and its portability is novel, but it's hard to envisage first-generation smart displays having broad appeal right now. Wireless speed is no good for viewing video and the device is far too expensive for the convenience of checking your emails from the sofa. ■

Rosemary Haworth



ViewSonic Airpanel V150

- ☐ ViewSonic: 01293 643 900
- ☐ www.viewsonic.com
- ☐ £850 ex VAT

Specifications

400MHz Intel XScale; Windows XP Professional & SP1; 2.6kg; 32MB ROM; 64MB SDRAM; Wi-Fi USB airtsync adapter; 5-hour battery life; 15in wireless touch-sensitive monitor; docking station; battery pack and AC adapter; 2 x stylus input pens

Good points

Rugged casing; bright display; portability is convenient

Bad points

Very expensive; no good for video playback or gaming; requires upgrade to XP Pro

Build quality



Features



Value for money





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Budget notebook

Time Traveller N3901 XP2400 PQ

The Time Traveller is the first notebook we've seen to boast the new Athlon XP-M 2400+ processor. The M stands for mobile and, as this brand-new chip is based on the new Barton core, we were expecting big things from it.

The 1.8GHz Athlon XP-M 2400+ is made with desktop-replacement notebooks in mind and is the second most powerful of AMD's new range of processors. Time has teamed up this CPU with 512MB of DDR RAM and a 60GB hard drive. Although the specification promised much, the Traveller failed to live up to our expectations.

Its WorldBench 4 score of 107 is disappointing in comparison with other systems in the Budget notebook range – this was achieved at a resolution of 1,024x768, not even the native resolution of 1,400x1,050. The display looked squashed and text was difficult to read at the lower resolution, although the higher setting solved this problem.

The 24/16/10-speed (read/write/rewrite) CD-RW doubles up as an eight-speed DVD-ROM drive, so not only do you have a backup device you can also watch DVDs on the move.

On the down side, the Traveller weighs nearly 4kg so you won't want to carry it around for too long.

Battery life is good thanks to the Mobile Athlon's PowerNow technology. This restricts the processor so it only draws in as much power as it needs and uses a minimal amount when the notebook is idle. There's a three-year warranty, which is a bonus even though it's only return-to-base cover.

Verdict

Time hasn't quite harnessed the potential of the new Mobile Athlon processor – the Traveller N3901 should have performed much better than it did and this device certainly isn't a viable desktop-replacement system. However, the screen is good, there's plenty of memory and storage space and it comes with a decent warranty. ■

Ben Camm-Jones



Time Traveller N3901

- Time: 01282 777 555
- www.timecomputers.com
- £1,099 ex VAT

Specifications

1.8GHz AMD Athlon XP-M 2400+; Windows XP Home; 512MB DDR RAM; 60GB hard drive; 15in TFT max res 1,400x1,050; 24x/16x/10x CD-RW 8x DVD-ROM combo drive; 3.8kg; 328x274x46mm; 3-year warranty

Build quality



Features



Value for money



Budget notebook

AJP M3000N

Intel's new Centrino technology furnishes notebooks with the latest Pentium-M processor, 855 chipset and wireless LAN as standard. Intel stresses the importance of Centrino's increased portability and weight, rather than its performance, and this is just as well since it's the AJP's endurance and trim figure that's likely to lure the buyers.

The M3000N is incredibly lightweight while the long battery life makes it an excellent choice for long journeys – the AJP ran our intensive test software for three hours 47 seconds. The option of adding a second battery means you could easily squeeze out seven hours of work time.

The keyboard is fine, but the trackpad alternates between sluggish and over-responsive with alarming frequency. It could be that our notebook was damaged and, if desk space isn't crucial, an external mouse would solve the problem. Nonetheless, it's something to bear in mind if you'll be relying on the trackpad for long periods of time.



Despite its RAM and 40GB hard drive, the AJP scored a mere 113 in our WorldBench tests. Last month's Toshiba Tecra scored 115 with just a 1.3GHz Pentium-M chip on board – supposedly slower than AJP's 1.6GHz Pentium-M.

The 64MB Intel Extreme graphics controller generates solid frame rates, but the screen, though bright and colourful, only measures 14.1in. The range of ports and connectors includes FireWire and four USB ports, while audio quality is passable. The combo DVD/CD-RW drive is in keeping with other Budget models, but no floppy drive is included as standard.

Verdict

The AJP is a lightweight notebook capable of running for extensive periods on battery power. However, we found performance lacking and the trackpad unreliable. ■

Robin Morris

AJP M3000N

- AJP: 020 8208 9710
- www.ajp.co.uk
- £1,349 ex VAT

Specifications

1.6GHz Pentium-M; Windows XP Pro; 512MB DDR RAM; 40GB hard drive; 64MB Intel Extreme; 14.1in TFT max res 1,024x768; 10x/8x/8x CD-R/RW/DVD drive; FireWire port; 2.27kg; 309x254x30mm; 2-year warranty

Build quality



Features



Value for money





Digital TV box Netgem iPlayer

The success of Freeview, the subscription-free replacement to ITV Digital, has seen a number of manufacturers launch set-top boxes that allow you to receive DTT (digital terrestrial TV) on a standard television.

While the various devices differ in design and interface, they're pretty much identical when it comes to functionality. Not the iPlayer, though – in addition to DTT it adds internet and email capabilities to your TV.

Presently the box only allows internet access via the internal modem on a preconfigured local-rate number. This is ideal if iPlayer is your first internet device but, for those on broadband who left per-minute charges for web access a long time ago, it's not so good.

The iPlayer also sports a USB port and a promised future update will support certain USB network adapters. At the moment, though, it's dialup only.

Tailored websites are divided into categories such as news, sport and entertainment. Alternatively you can surf the web normally, although not all sites will display correctly.



Text input is SMS style via a numeric pad on the remote control or the optional keyboard.

As a DTT box it performs well with plenty of nice touches such as being able to browse the now-and-next program information before switching channels. There are problems viewing this data on different muxes (groups of channels on the same frequency), but this should be rectified soon.

Verdict

The iPlayer is a simple way to get DTT and web facilities for little more than a bog-standard DTT box. However, Netgem needs to provide software support for the promised USB accessories. ■

Will Head

Netgem iPlayer

- ☐ Netgem: 01727 884 870
- ☐ www.netgem.com
- ☐ £110 ex VAT

Specifications

DTT receiver; remote control; 2 x scart sockets; optional keyboard; electronic program guide; interactive digital text; card slot; digital audio-out; USB socket; modem

Build quality



Features



Value for money



Smartphone Nokia 3650



Nokia 3650

- ☐ Nokia: 08700 555 777
- ☐ www.nokia.co.uk
- ☐ £94 ex VAT (with contract)

Specifications

4,096 colour screen with 176x208 pixels; triband; 640x480 res built-in camera; 3.4MB internal RAM; 16MB MMC; infrared; Bluetooth; 4-hour talktime; 200-hour standby; 130g; 130x57x26mm

Build quality



Features



Value for money



Supporting an unusual design, the 3650 is the latest in a long line of products that are part PDA, part mobile phone.

It has a calendar, address book and a to-do list which can be synchronised with your PC. According

to Nokia, this can be achieved via an optional cable or wirelessly via Bluetooth

or infrared. We tried synchronising our test model over Bluetooth using the provided PC Suite software but it didn't work. Our advice is to invest in the cable.

We expected to find the unusual key layout difficult to use, but were pleasantly surprised. The five-way control pad let us work our way quickly through the different menus. Texting is more problematic. The altered position of the number keys is a nightmare and easily doubles the length of time it takes to write a message.

Nokia sees video as the 3650's killer app. The built-in camera can take still pictures, like many other phones, but it can also record 12-second movie clips. You can email these or send them via MMS but you'll need Nokia's media player installed to watch clips on your PC. The picture quality is nothing special and the video is jerky, but it could be a fun party trick.

There's only 3.4MB of internal RAM to store apps, images and videos. Thankfully the bundled 16MB MMC card provides some extra memory, although you have to remove the battery to get to it. Otherwise, all the standard features that we expect from high-end phones are present such as support for Java games, triband functionality, a GPRS modem and WAP 2.0 browser.

Verdict

The 3650's video feature is fun for the first few times, but the novelty soon wears off. Elsewhere, shortcomings in the synchronisation, the strange layout of the keypad and the sheer bulk of the device failed to impress us. ■

Stan Everett

Professional digital camera
Canon EOS-1Ds

Groundbreaking is not a term we use lightly, but it's one deserved by Canon's EOS-1Ds. This camera is the first to achieve the two big goals of digital SLRs: namely uncompromised lens coverage and film-like resolution with 11, yes, 11Mp (megapixels).

To give you some idea how much 11Mp really is, the EOS-1Ds matches the detail captured from a 35mm film scanner running at 2,700dpi (dots per inch) – and it's the first digital SLR which can claim this quality. Certainly, it can create A3 inkjet prints without breaking a sweat.

The bigger picture

Sensor size is another crucial feature. Virtually every digital SLR has a chip that's physically smaller than a frame of 35mm film. This effectively multiplies all lens focal lengths by around 1.5 times – a disaster for wide-angle photography. In contrast, the Canon's sensor is the same size as 35mm film so the field of view is unchanged.

In terms of design, the EOS-1Ds is essentially a digital version of Canon's professional EOS-1V film camera with its optional powerbooster attached. It may be a large and heavy device, but the 1Ds offers superb ergonomics, decent build quality and a long battery life thanks to its rechargeable pack.

Round the back is a 2in LCD screen that, like other digital SLRs (apart from the Olympus E10 and E20), can only be used for reviewing images. Composition is via the optical SLR viewfinder and there's a wealth of shooting information displayed including shutter speed, aperture, ISO rating, exposure compensation and the number of images remaining in burst mode. There's also no fewer than 45 autofocus points which selectively illuminate in the viewfinder.

The camera stores images on Type I or II CompactFlash cards – you’ve got to supply your own, though – and it’s also compatible with IBM’s Microdrive. A 12bit RAW mode is also offered. Down the side are ports for the electronic cable-release, PC sync for lighting (along with a flash hotshoe at the top) and FireWire for fast image transfer or remote control using your PC.

The EOS-1Ds offers as little or as much manual control as you like. There's 10 white-balance settings, ISO speeds from 100

to 1,250, shutter speeds from 1/8,000 to 30 seconds with Bulb too. The large buffer can store up to 10 full-resolution Jpegs in burst mode at 3fps (frames per second), although there's no video capture or output facilities.



Quality at a price

The combination of all this technology is a camera that handles superbly and delivers awesome resolving power. It's testament to

the 1Ds that zooming in on its images using Photoshop reminded us of working with high-resolution 35mm film scans.

The EOS-1Ds is a groundbreaking but expensive device. At £5,956 (excluding lens and memory) this Canon offering is clearly aimed at early-adopting professionals or enthusiasts with very deep pockets. There's also competition

in the form of Kodak's forthcoming DCS-14n, which sports both 14Mp resolution and a lower price tag. Then there's 6Mp digital SLRs, such as Canon's own EOS-10D, which at less than £1,500 represent comparatively great value and deliver sufficient quality.

Verdict

Canon's EOS-1Ds may be expensive but, as the first digital SLR with uncompromised lens performance and massive 11Mp resolution, it represents the technological holy grail many film users have been holding out for. It's an important milestone in digital photography – after all, it's the first digital SLR which can genuinely claim 35mm film quality and handling.

At £5,956, though, this camera is clearly aimed at early-adopting professionals. The rest of us will have to be patient and hope these capabilities filter down into more affordable products sooner rather than later. ■

Gordon Laing

It may be a large and heavy device, but the 1Ds offers superb ergonomics, decent build quality and a long battery life thanks to its rechargeable pack

Canon EOS-1DS

- ☐ Canon: 08705 143 723
- ☐ www.canon.co.uk/digitalcameras
- ☐ £5.956 ex VAT

Specifications

11Mp; 4,064x2,704 pixels; 3:2 aspect ratio; any Canon EF lens (not supplied); CompactFlash Type I or II (not supplied); can use IBM Microdrive; 5MB image at best Jpeg quality; 2in LCD and optical SLR viewfinder; rechargeable pack and recharger supplied; 156x158x80mm; 1,600mAh inc battery; 1-year warranty

Good points

Massive 11Mp output; full-frame sensor; superb build-quality and handling

Bad points

Expensive; no video capture or output facilities

Build quality





Power PC Mesh Matrix 3000+ RD98

Taking pride of place in this stunning Mesh PC is the AMD Athlon XP 3000+. Although this processor runs at a clock speed of 2.19GHz, the system's WorldBench 4 score of 133 shows that AMD's fastest chip yet has the advantage over Intel's 3.06GHz Pentium 4. The Systemax Reliance 3307, which uses this P4 chip, can only manage a WorldBench score of 123.

The Matrix comes with 512MB of PC2700 DDR RAM and a 200GB hard drive, although only high-end video enthusiasts will make use of such a huge amount of hard drive space.

Mesh's monitor of choice is the near-flawless Mitsubishi Diamond Pro 930SB, which offers a 0.24mm dot pitch, gorgeous image quality and an 18in viewable area. Its graphics card, the 128MB ATI Radeon 9800 Pro, is so new there aren't even standalone versions available yet.

With this in mind, we were surprised to find the Multivision Ionix Wonder, our current Best Buy Power PC (see page 200), fared better in our graphics and video tests despite using the older Radeon 9700 Pro. Admittedly, though, the difference amounted to little more than the odd frame here and there.

The sound system pairs Creative's Audigy2 with the seven-piece (six speakers, one subwoofer) Inspire 6700 setup. There's also a combo drive, which offers 16-speed DVD and 48/24-speed CD-R/RW facilities.

Sony's fantastic DVD burner, the DW-U10A, is bundled with the Matrix. It supports both major burning standards (DVD-R and DVD+R) so, as well as providing 4/2.4-speed writing facilities, it will remain usable whichever standard wins the DVD war. You'll also find a strong array of connectors, including one FireWire and six USB ports (two of which are front-mounted).

Verdict

For anyone who values raw performance, masses of storage or top-flight DVD burning facilities the outstanding Mesh Matrix 3000+ could be the perfect partner. ■

Robin Morris



Mesh Matrix 3000+ RD98

- Mesh: 020 8208 4702
- www.meshcomputers.com
- £1,299 ex VAT

Specifications

3000+ AMD Athlon XP; Windows XP Home; 512MB DDR RAM; 200GB hard drive; 48x/24x/48x CD-RW; 16x DVD-ROM; 4x/2x/2.4x/2.4x DVD-R/-RW/+R/+RW; 19in monitor; Audigy2 sound card; 3-year warranty

Build quality



Features



Value for money



CD-RW drive Teac CD-W552E

With all the talk of rewritable DVDs, you could be forgiven for finding the ageing CD-RW standard a little stale. MSI breathed new life into the category last month, offering incredible 52-speed burning capabilities for a shade over £40. This month sees Teac's 52-speed entrant, the CD-W552E.

As ever, high-tech features are required to keep the discs spinning consistently. Continuous OPC (optimum power calibration) runs a series of tests on each CD-R/RW to determine how much power to use when recording the disc, while the Intelligent Speed Control determines the highest writing speed available without risking errors.

Once the drive has started writing the disc, FineFocus control keeps the laser correctly positioned while Zone-CLV varies the recording speed according to whether the laser is nearer to the centre or the edge of the CD.

Other features, including Teac's WriteProof technology, a 2MB data buffer (which keeps buffer underruns to a minimum) and an access time of 100ms (milliseconds) are very much in keeping with other CD-RW drives.

A copy of Nero Burning Rom seems almost compulsory these days, but it remains the most reliable and intuitive package on the market.

Teac's speciality has always been speed and the CD-W552E maintains this tradition. The drive required just one minute 46 seconds to burn a 350MB CD-R – faster than both Asus' and MSI's 52-speed models. CD-RWs are similarly well catered for with the drive capable of sub-three minute rewrites.

Verdict

As is often the case with Teac drives, the CD-W552E isn't the cheapest model on offer and last month's MSI CR52-A2 promises similar 52-speed capabilities for much less money. However, Teac products are all about quality and performance and the CD-W552E marks itself out as the fastest drive on the market. ■

Robin Morris



Teac CD-W552E

- Microwarehouse: 08705 168 671
- www.teac.co.uk
- £55 ex VAT

Specifications

52x/52x/24x read/write/rewrite speed; EIDE; 2MB buffer; Nero/Nero Express; 0.997kg; access time 100ms; 149x198x42mm; 2-year warranty

Build quality



Features



Value for money



Intermediate digital camera Toshiba PDR 3310

The 3310 is easily Toshiba's best compact model. Designed with beginners in mind, it's easy to use and ergonomically comfortable. Its compact proportions push the price up, though, so it doesn't offer the same value for money as other contenders in our chart (see page 216).

The Toshiba has a 3.2Mp (megapixel) CCD (charge coupled device) and offers a maximum resolution of 2,048x1,536. While you'll need more memory than the bundled 16MB Secure Digital card – it only holds six high-resolution shots – drop the quality and there's room for 64 photos.

It's good to see a 3x optical zoom on such a compact device in this price range and its quick zoom mechanism is a nice touch. We were impressed with the 3310's overall response time. You can cycle through images quickly and automatic focusing takes no time at all. Another excellent extra was the rechargeable lithium battery and bundled adapter.

The 3310 is ideal for travellers and the compact dimensions are complemented by a strong metal chassis, so it feels extremely robust. It's a shame that there's no travel case,

but an automatic plastic cover does protect the lens.

Being designed with ease of use in mind, the 3310 lacks some manual configurations. There are enough shooting options to satisfy a keen learner, though, with control over presets for white balance, aperture, metering and full exposure control.

Image quality could have been better and focusing wasn't particularly sharp – our outdoor shots looked gloomy despite being shot on a sunny day.

Verdict

Despite lacking the image quality of other cameras in the 3.2Mp range, we were impressed with the 3310. If you want the best image quality you can get for your money then look elsewhere. If you're after a simple-to-use, well-built, compact device with a good feature set then this could be the model for you. ■

Spencer Dalziel



Toshiba PDR 3310

- ☐ Toshiba: 01932 828 828
- ☐ www.toshiba.co.uk
- ☐ £329 ex VAT

Specifications

3.2Mp; max res 2,048x1,536;
16MB SD card; 1 x rechargeable
lithium battery; 91x57x32mm;
175g; 64/6 max/min photos on
16MB; 1-year warranty

Build quality



Features



Value for money



Flat-panel display LG Flatron L1710B

The highly competitive flat-panel market continues to churn out ever-cheaper models.

While 18in

two-port USB hub and both RGB and digital DVI-I interfaces. The in-depth menu system is intuitive and the brightness and contrast controls are assigned dedicated buttons for ease of use.

The Flatron's 250cd/m² brightness rating isn't particularly impressive and there's certainly brighter models on the market. Having said that, the LG feels light and focused – you may even need to turn down the brightness control to avoid eyestrain. With this in mind, the LG is ideal for applications and general Windows use.

The colour scheme (abetted by the 500:1 contrast ratio) is rich and varied, while the response time of 20ms allows the L1710B to handle animation without any blurring.

Verdict

There's little about the Flatron L1710B that isn't beautifully implemented. From its stylish 6.6kg frame to the colourful screen display and the fantastic £304 price tag, the L1710B is yet another excellent 17in flat-panel vying for your attention. ■

Robin Morris

flat-panel displays may finally be coming down to affordable price levels, it's the 17in category that continues to offer the best mix of price and performance. Offering an actual viewing area only 0.5in smaller than the average 19in CRT, the L1710B is another excellent release from LG that will draw onlookers thanks to its chic silver casing and high-calibre picture quality.

The Flatron offers all the hardware specifications required from a 17in flat-panel such as a resolution support of 1,280x1024, 0.264mm dot pitch and 140-degree viewing angle. The ports and connectors include a

LG Flatron L1710B

- ☐ LG: 0870 607 5544
- ☐ www.lge.co.uk
- ☐ £304 ex VAT

Specifications

17in flat-panel; native res 1,280x
1,024; 0.264mm dot pitch; 500:1
contrast ratio; 140-degree viewing
angle; 250cd/m²; 370x223x421mm;
6.6kg; digital connector; USB port;
3-year warranty

Build quality



Features



Value for money



Palm-based portable computer

AlphaSmart Dana

Is it a Palm? Is it a notebook? Well, the Dana is a bit of both. Despite sounding like a dodgy pop act, this is actually an ingenious mobile computer. Built around the Palm operating system, this lightweight device also provides a full keyboard and a 560x160 screen.

The 91g Dana is a fraction of the size of a standard notebook and easy to carry around.

Unlike standard Pocket PC or Palm PDAs, the keyboard is large and makes typing on it a pleasure. The screen can be rotated 90 degrees using the bundled software, allowing you to view cumbersome spreadsheets.

To be fair, the screen is just an enlarged version of the Palm screen found on its handheld devices. But for the purposes of reading text, typing documents and tables the Dana is more than adequate.

To share documents between Dana and your desktop PC is similar to the way you transfer data between a handheld and your main PC, although it uses a USB synchronisation cable rather than a cradle. Power is provided either via a mains adapter or the rechargeable AA batteries which are not included.

To shift text from the Dana to a PC, simply type text into the AlphaWord application, hit the Send button and it instantly appears onscreen. You can then continue typing using the Dana keyboard or on your PC.

Moving around onscreen is the same as with a Palm. You use the stylus in combination with a touch-screen, although we did find the screen slightly unresponsive.

The Dana comes with 8MB of storage, but

there are two expansion slots for MMC (Multimedia Card) or SD (Secure Digital) cards. There are two USB ports on the device, which means you can hook it up to a USB printer in order to output documents.

One criticism we have is that the Dana uses infrared to connect to email and the web. If our experience with our Palm is anything to go

by, this will be both slow and unreliable.

However, AlphaSmart says it's working on drivers for USB modems and a Wi-Fi SD card to access wireless networks.

Verdict

Dana is in no way a substitute for a notebook. But if you find that lugging your portable PC around with you is a drag, but equally your PDA is too fiddly to input data and write up reports on the move, this could be the halfway house you're looking for. ■

Ursula Seymour



The 91g Dana is a fraction of the size of a standard notebook and easy to carry around. The keyboard is large and makes typing on it a pleasure

AlphaSmart Dana

- ☐ AlphaSmart: 020 8492 3690
- ☐ www.alphasmart.co.uk
- ☐ £299 ex VAT

Specifications

33MHz Dragonball VZ; Palm OS 4.1; 8MB memory; 560x160 pixel mono screen; backlight; 2 x MMC/SD; battery charger; 3 x AA batteries; AC adapter; 2 x USB ports; IrDA port; full-size keyboard; 314x235x48mm; 91g

Build quality



Features



Value for money



Cordless telephone headset

GN 9120

GN 9120

- ☐ GN Netcom: 01784 220 140
- ☐ www.gnnetcom.com
- ☐ £250 ex VAT

Specifications

Cordless telephone headset; noise cancelling microphone; adjustable headband; earhook; 100m range; 8-hour talktime; 1.5hr battery recharge time; mute function; volume control; 2-year warranty

Build quality



Features



Value for money



Fancy freeing yourself from your phone? GN Netcom's GN 9120 is a wireless headset that has a range of 100m. It allows you to answer a call, wander across the office to confer with colleagues and keep chatting as you go.

To set it up you have to plug a base unit into your phone, which then transmits the phone signal to the headset.

We tested the unit by walking down to the other end of our office – around 40m from our phone – and through two doors. Sound remained relatively clear, although there was some noise on the line the further away we got.

Unless you pay an extra £45 for a hook switch device, which manually lifts and lowers the handset on your phone, you have to use your

telephone handset to start and finish calls. This defeats the purpose of a long-range wireless headset.

We liked the freedom, but the GN 9120 is an expensive way to achieve this liberty. Unless you invest in a hook switch, you may as well stick with a cheaper corded version. ■

Ursula Seymour



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Wireless ethernet adapter SMC EZ Connect 2.4GHz SMC2670W

Wireless networks are great – no cables, no mess, no fuss. They're easy to set up and you can be wirelessly sharing files and a broadband connection in minutes – provided you've got a USB port, PC Card or PCI slot on the device you want to hook up.

One problem with a wireless network is connecting items that only have an ethernet port. This is where SMC's wireless ethernet adapter comes in. Plug the EZ Connect into any device that supports a standard ethernet connection and it will connect it up to a wireless 802.11b network. Well, it's that simple providing you're not using any security on your wireless network which only a fool would do.

In this case, you'll need to connect SMC's adapter up to a PC first in order to manually configure it. You can talk to the EZ Connect via the bundled Windows utility or simply via an internet browser. Once you've entered the security settings you can then plug the adapter into whatever device you wish to network wirelessly.

EZ Connect is designed to be 'transparent' on the network so doesn't require its own IP address. As far as the plugged-in device is concerned, it's sitting on a normal wired network.

In theory, then, any hardware with a standard ethernet port should work with the adapter. If you use a printer, console or ethernet webcam that you want to add to your network, but without the hassle of additional wires, then the SMC2670W should bridge the gap for you.

SMC EZ Connect 2.4GHz

- SMC: 0800 581 689
- www.smc-europe.com
- £99 ex VAT

Specifications

802.11b wireless ethernet adapter; network transparent; 64bit & 128bit WEP encryption support; web & Windows-based management; supplied AC adapter

Build quality



Features



Value for money



Verdict

The SMC2670W is expensive compared to other 802.11b adapters – at least twice the price. However, it could prove invaluable if you wish to connect an ethernet-only device to a wireless network. It's not a product for general use, but if you have the need for it, it's the ideal solution. ■

Will Head



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Colour network printer

Minolta-QMS MagiColor 2300W

The colour network printer market isn't noted for its bargains, so it's surprising to see a sub-£500 model hitting the streets. The MagiColor 2300W, Minolta-QMS' latest addition to its range, is in essence a stripped-down version of the 2300 DeskLaser (reviewed January 03).

While the 2300W shares many basic specifications with the DeskLaser, this printer has less upgrade potential. Both devices offer 32MB of SDRAM, for instance, but only the DeskLaser lets you upgrade the memory should you need to print larger jobs.

We criticised the 2300 DeskLaser for its limited paper handling facilities and, with its 200-page input and output trays, this fault also applies to the 2300W. With no larger papertrays available as an optional extra, you'll be restricted to loading 200 pages at a time. If you're planning on running off several hundred pages at any one time you'll have to keep an eye on the 2300W – a nuisance to say the least.

However, complaining about the MagiColor's lack of high-end facilities is to miss the point. Printing quality is extremely good. The 2300W may lack the 2,400x2,400dpi (dots per inch)

resolution support of the DeskLaser but, at 600x600 and 1,200x600dpi, image and text quality is clean and beautifully defined. Speed is decent as well – at 600x600dpi the printer averages 12.2ppm (pages per minute) and 1.6ppm at mono and colour respectively. Manual duplex facilities (allowing for double-sided printing) are also available.

Verdict

For anyone needing to frequently run off print jobs consisting of hundreds of pages, a higher-end laser printer is needed. However, for the majority of home and small office users the Minolta-QMS MagiColor 2300W will make an excellent purchase. It generates terrific full colour high-resolution images in a fraction of the time it'll take an inkjet printer. And with much lower running costs, this model will, over time, pay you back handsomely. ■

Robin Morris



Minolta-QMS MagiColor 2300W

- Minolta-QMS: 01784 442 255
- www.minolta-qms.co.uk
- £499 ex VAT

Specifications

32MB/288MB installed/max memory; 600x600 hardware res; claimed 16/4ppm mono/colour print speed; 356x500x392mm; 27.8kg; parallel interface; USB; £55 black toner; £75 colour toner; 4,500 pages print life; 1-year warranty

Build quality



Features



Value for money



Antivirus firewall

Trend Micro Gatelock X200

Avoiding computer viruses requires forethought, awareness and discipline. It's no good wishing you'd bought, installed and updated that antivirus package after a seemingly innocuous Britney Spears movie clip has just wiped out all your data files.

If you're running a network it's even worse. You can do your best to protect yourself, but if your fellow users aren't applying the same due diligence they can easily take down your files with theirs.

What you need is something that stops the infected attachments arriving in the first place, which is where Trend Micro's Gatelock X200 comes in. In addition to providing standard routing and firewall functions, it checks incoming and outgoing email for nefarious attachments.

Gatelock includes hacker prevention and logging too, which should keep your network safe from script kiddies with nothing better to do than look for vulnerable machines to attack. With the dawn of always-on broadband connections, this is no bad thing.

Gatelock is easy to install, especially if you've already got a router. We tried sending some viruses via email and it successfully blocked them on their outward and inward journeys. The automatic update feature (which is free for 12 months then £17 per year thereafter) ensures that any new viruses are picked up by Gatelock.

The Trend Micro X200 only has one network port, rather than the usual minimum of four, but it integrates with any existing router. It's also possible to connect it to a hub to provide more ports.

Verdict

If you're thinking about sharing your broadband connection then Gatelock is an excellent safety net, keeping your network free from viruses and ensuring you don't infect other users. ■

Will Head



Trend Micro Gatelock X200

- Trend Micro: 0800 169 6743
- www.gatelockglobal.com
- £106 ex VAT

Specifications

ethernet router; antivirus and antihacker protection; automatic updates; 1 x WAN port; 1 x LAN port; web interface; 120x170x30mm

Build quality



Features



Value for money



Wi-Fi ADSL routers

D-Link DSL-604+, DrayTek Vigor 2600We, Thomson SpeedTouch 570 & Zyxel Prestige 650HW

As wireless networking-based devices drop in price and becomes more attractive to the mass market, so the range and choice of these kits has dramatically expanded. The latest breed of device is the wireless ADSL router which combines an ADSL modem, WAP (wireless access point) and switched router in one convenient package.

We looked at four Wi-Fi ADSL routers: the D-Link DSL-604+, DrayTek Vigor 2600We, Thomson SpeedTouch 570 and Zyxel Prestige 650HW. As pricing descends to the commodity level there is a tendency towards me-too sameness with regard to features and functionality, but that doesn't apply to these wireless devices.

Features compared

All four routers offer similar basic functionality. The D-Link, DrayTek Vigor and Zyxel Prestige feature four 10/100Mbps (megabits per second) switched ethernet network ports. This allows you to easily hook the routers up to existing cabled networks or to act as a fast-switched hub.

With its single network port, the odd one out is the SpeedTouch 570. This is a reflection of its target market: existing business users that don't need an extra mini-hub on their network. The D-Link DSL-604+ sported a unique console port, allowing you to directly configure it via telnet and a serial cable rather than via the network.

All four ADSL routers subscribe to the Wi-Fi (802.11b) wireless networking standard. Offering a maximum bandwidth of 11Mbps, this is more than adequate for sharing web access and for basic file-transfer requirements. The DSL-604+ doubles this bandwidth to 22Mbps, although it's wholly proprietary so you'll have to stick to D-Link's wireless kit throughout.

Another area where the D-Link excels is its encryption capabilities.

Wireless networks are notoriously insecure and, while the other routers offer 128bit encryption, the DSL-604+ tops the bill with its strong 256bit encryption

Wireless networks are notoriously insecure and, while the other routers offer 128bit encryption, the DSL-604+ tops the bill with its strong 256bit encryption.

The four routers have relatively sophisticated features such as a firewall, port forwarding and UPnP (Universal Plug and Play). Only the SpeedTouch 570 fails to offer dynamic DNS (domain name

system) or VPN (virtual private network) support. However, this router does have a nifty security trick – new clients must register, which requires a button to be physically pressed on the router. War drivers beware.

None of the wireless routers are upgradeable to the upcoming 54Mbps 802.11g standard, but the Zyxel Prestige 650HW employs a



D-Link DSL-604+

D-Link DSL-604+

- ☐ D-Link: 020 8731 5555
- ☐ www.dlink.co.uk
- ☐ £169 ex VAT

Specifications

802.11b/22Mbps wireless access port; ADSL modem; 4 x 10/100Mbps switched ethernet ports

Good points

Fast; 256bit encryption; price

Bad points

Shorter range; rebooting is a nuisance

Build quality



Features



Value for money



Location, location, location

You might not be able to do much to improve the throughput of Wi-Fi but you can extend its range with a little bit of forethought. Choose the best location for your WAP (wireless access point). Mount it high on a wall with its antennae vertical, well away from any large bits of metal or electronic equipment. Make sure it's centrally placed with regard to the devices that will connect to it. Keep an eye out for microwave ovens, 2.4GHz cordless phones and Bluetooth devices – these gadgets are known to cause interference. If you're unlucky enough to have another wireless network next door, choose a different channel to avoid bandwidth sapping clashes. The 83MHz-wide 802.11b band is split into 11 22MHz-wide channels, all of which overlap with each other apart from channels one, six and 11.

If reception is particularly poor or you need to cover large areas, you may need to fork out for multiple WAPs which can act as bridges. Most wireless network adapters support 'roaming' and, in areas where WAP coverage overlaps, the adapter will latch on to the strongest signal.

DrayTek Vigor 2600We

- ☐ Seg Comms: 0870 745 8550
- ☐ www.seg.co.uk
- ☐ £199 ex VAT

Specifications

802.11b/11Mbps wireless access port; ADSL modem; 4 x 10/100Mbps switched ethernet ports

Good points

Well specified

Bad points

Expensive; unattractive web UI and documentation

Build quality



Features



Value for money





DrayTek Vigor 2600We



Thomson SpeedTouch 570



Zykel Prestige 650HW

removable PC Card transceiver so it should be possible to upgrade in the future.

Setting up

While you can configure the routers wirelessly, it's probably easier to use a network cable at first. Set your PC to automatically pick an IP address, plug it in to the router and point your browser to 192.168.1.1 or similar. Here you can enter things like the network SSID (service set identifier) and, of course, your ADSL username and password.

In terms of printed documentation, all four devices offer skimpy get-you-started guides with full documentation provided online as PDF files. The Vigor 2600We has a particularly ugly and awkward-to-use browser interface. Only the SpeedTouch 570 uses a Windows-based wizard to install the router, which ensures that the TCP/IP settings on the client PCs were set correctly. On the down side, the Thomson's browser interface is relatively restricted, forcing you to rerun the setup wizard in order to, say, change the logon username or password.

Both the SpeedTouch 570 and Prestige 650HW rely heavily on an intimidating DOS-style command-line interface for configuring the more specialised aspects of the router – for example, defining firewall rules. While this may be fine for more experienced users, it makes these two routers unsuitable for complete novices.

Security settings were turned off by default on all four of the routers, so it's important to sort this out at the earliest opportunity. By and large all the devices come with adequate security and access control though, again, the DSL-604+ offers the most options which is no bad thing.

Put to the test

As with any ethernet network, cabled or wireless, the actual bandwidth you get from Wi-Fi is always a fraction of the maximum figure quoted. From an 11Mbps Wi-Fi network you'll get around

4Mbps of bandwidth, rising to about 6Mbps if you use D-Link's 22Mbps DSL-604+ router.

At this slow end of the wireless networking spectrum, speed is probably less important than range and coverage. But if you do want maximum performance at a good price then the DSL-604+ is one for the shortlist.

The D-Link's not perfect, however. The need to reboot the router in order for a configuration change to take place is irritating, while its status LEDs are so dim that they're virtually invisible in normal lighting.

While we experienced no interoperability issues with any of the four routers, only the SpeedTouch 570 sports a Wi-Fi badge. This guarantees interoperability between wireless hardware and, again, is a reflection of its target business market.

All of the devices performed well – for general use, you could opt for any one of these wireless routers and not go far wrong. However, business users should shortlist the SpeedTouch 570 or the Prestige 650HW, while home users should consider the D-Link DSL-604+ or the Vigor 2600We.

Verdict

The D-Link DSL-604+ is fast but proprietary and offers top-notch security features. It's cheap, too, although it's plastic styling could be improved.

The DrayTek Vigor 2600We is a well-specified model that's let down by a poor web user interface and a relatively steep price tag. The Thomson SpeedTouch 570 is a well-built, unobtrusive device aimed at the business user. It has a relatively low price tag – if you know your TCP/IP then this is the one for you. The Zykel Prestige 650HW is a competent wireless device and, although novices will find its command line interface daunting, it's still a good business choice. ■

Roger Gann

Thomson SpeedTouch 570

- SpeedTouch: 01295 222 170
- www.speedtouch.co.uk
- £169 ex VAT

Specifications

802.11b/11Mbps wireless access port; ADSL modem; 1 x 10/100Mbps ethernet port

Good points

Well specified and good built quality

Bad points

Complicated command line configuration; no hub/switch

Build quality



Features



Value for money



Zykel Prestige 650HW

- Zykel: 0118 981 0600
- www.zykel.co.uk
- £199 ex VAT

Specifications

802.11b/11Mbps wireless access port; ADSL modem; 4 x 10/100Mbps switched ethernet ports

Good points

Multimedia NAT; easy to set up; upgradeable

Bad points

Command-line firewall configuration; pricey; skimpy printed documentation

Build quality



Features



Value for money

