Power PC
Evesham Axis 3200+

This is the first PC we've seen that comes powered by AMD's latest Athlon 3200+ processor. It also boasts a whole new case packed with decent specifications and features and proves excellent value for money.

With its silver-fronted Mitsubishi monitor and Microsoft's black wireless optical mouse and keyboard, the Axis is a beautifully styled system.

Internally it's just as impressive. Powered by AMD's 3200+ Athlon running at 2.21GHz, the Axis is clocked slower than some of the other chart entries. But remember that the processor uses the new Barton Core so it pushes better performance per megahertz. Twinned with the processor is a 120GB hard drive and 512MB of DDR (double data rate) RAM, a combination which resulted in a WorldBench score of 133 and makes this a powerhouse of a PC.

If 120GB of storage space isn't enough for you, there's a combo CD-RW/DVD-RW drive giving plenty of scope for backing up your system as well as lots of room for saving any digital video clips if you choose to use the Pinnacle editing software.

Graphics-wise the Axis benefits from ATI's flagship 128MB Radeon 9800 Pro. While the 19in Mitsubishi Diamond Plus 93SB is certainly good it's not quite up to the standard of some of the other models in our chart. With the Radeon graphics card coursing through it, though, we achieved some stunning frame rate results. Our Quake III benchmark pushed 97fps (frames per second) at 1,600x1,200 and it shot through our video tests in no time at all.

PC sound doesn't get much better than the Audigy2 but it's a pity Evesham didn't bundle the Live Drive to add extra functionality. However, fair compensation comes in the three-year warranty.

Verdict

While not necessarily the biggest or fastest PC available, there's no denying Evesham knows how to put together a brilliant all-rounder and here the Axis 3200+ definitely satisfies. It's a well-built model that's extremely powerful if you've got the money to pay for it. ■

Spencer Dalziel

Evesham Axis 3200+

- ☐ Evesham: 0870 160 9500
- ☐ www.evesham.com
- ☐ £1,449 ex VAT

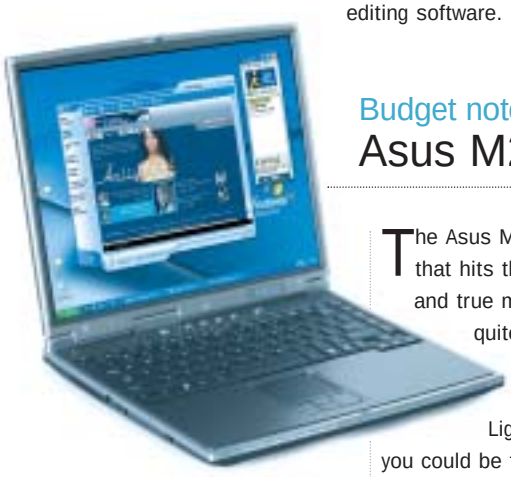
Specifications

AMD Athlon 3200+ (2.21GHz) processor; 512MB DDR; 120GB hard drive; combo DVD-RW/CD-RW drive; 19in Mitsubishi Diamond Plus 93SB; 128MB ATI Radeon 9800 Pro graphics; Audigy2 sound card; Creative Inspire 6700 6.1 channel speakers; Windows XP Home Edition; 2-year onsite, 1-year return-to-base warranty

Build quality

Features

Value for money



Budget notebook
Asus M2N

The Asus M2N is a dedicated business model that hits the spot between good functionality and true mobility. Such balance comes at quite a price but if you want one of the best small notebooks around it's worth the expense.

Lightweight, and with tiny dimensions, you could be forgiven for thinking this was a subnotebook. On the contrary, it is a compact model packed with great features. The M2N twins the fastest Pentium M processor running at 1.6GHz with 512MB of DDR (double data rate) RAM and a 40GB hard drive.

Its WorldBench score of 113 might not be the quickest, but compare it to the 119 points garnered by a 2.4GHz Mobile Pentium 4 and you'll see just how powerful these lower clock speed Pentium Ms are.

Graphically it doesn't impress as much as other models. The 14.1in screen is powered by 64MB of onboard graphics rather than a standalone card, but to be fair this isn't an entertainment system and if you want to play games or watch DVDs it's more than capable.

Tipping the scales at a mere 2.2kg, the M2N was made to travel. We loved the tough magnesium alloy-backed case and good battery life on this notebook. Intel's Centrino mobile technology is very economical when it comes to power consumption and, combined with Asus' PowerGear utility, this model can last up to a claimed five hours on one charge.

The Asus doesn't come with a decent software bundle and the warranty is for two years rather than three, but there are some other excellent benefits: a combo DVD/CD-RW drive, a multiformat card reader that pops into the PC Card slot and XP Pro as the bundled operating system.

Verdict

The M2N is a great, if a little expensive, choice for road warriors who demand true performance and great mobility in their notebooks. If you want a larger entertainment model that you'll keep at home then look elsewhere, but for mobile business the Asus is a good buy. ■

Spencer Dalziel

Asus M2N

- ☐ Scan Computers: 0870 755 4747
- ☐ www.scan.co.uk
- ☐ £1,599 ex VAT

Specifications

1.6GHz Pentium M processor; 512MB DDR RAM; 40GB hard drive; 64MB Intel 855GM graphics; 14.1in 1,024x768 TFT display; 24x/8x/4x combi CD-RW/DVD; 56k modem; lithium-ion battery; 306x22x246mm; 2.2kg

Build quality

Features

Value for money

Ultra-portable notebook

JVC Mini Note MP-XP7230GB

Manufacturers seem to have pretty much abandoned small notebooks, despite the fact that recent advances in technology mean it should be even easier to cram a large amount of functionality into a small space. Most notebook manufacturers that is, except JVC.

The Mini Note MP-XP7230 (and its sibling the MP-XP5230) represent version two of its tiny notebook. While it has got bigger and more powerful inside, it still remains a tiny 225x 152x29mm. Weighing in at just 905g, in a world where most notebooks are 2kg plus, the Mini Note is definitely aimed at the traveller, rather than those after a fulltime desktop replacement. It's the smallest notebook we've ever seen and puts right many of the reservations we had about its predecessor.

A mini adventure

First up, the Mini Note has been given a performance boost – from 800MHz up to a 933MHz ultra-low voltage Mobile Pentium III. It's a shame it's not one of the brand-new Centrino (or rather Pentium M) processors, but it still provides a fair amount of power. It's WorldBench 4 score of 79 isn't anything groundbreaking, but this machine is about more than just power. In reality, although it lags in the performance stakes compared to even the slowest machine in our chart, in day-to-day use you're unlikely to notice it that much.

It comes with 256MB of RAM as standard (upgradable to 384MB) and a 30GB hard disk, which should be more than enough for your files. Despite its small size, JVC has packed in a useable screen. The 8.9in widescreen display has a native resolution of 1,024x600 and offers an incredibly sharp image for such a small display.

Expansion-wise you'll find a pair of USB 2.0 ports as well as 10/100 ethernet, modem, FireWire, one Type II PC Card slot and an SD (Secure Digital) slot. There's also VGA-out that connects via a custom cable.

The case is reassuringly solid and should cope easily with a harsh life on the road. The keyboard, while not full size, makes sensible use of the space available. You won't be able to touchtype but it's fine for tapping out documents using the two- or three-finger method and a reasonable speed is possible with practice.

Gimme some juice

As standard, the system comes with two batteries. A built-in unit along the back lasts for a claimed two hours. If that's not enough you can bolt on the extended battery which gives you three extra hours. While it does increase the size, it's still not that big.

> The 8.9in widescreen display has a native resolution of 1,024x600 and offers an incredibly sharp image

For the power hungry the large capacity battery will run for a claimed nine hours – more than enough for anyone on the move.

Although there's no internal optical drive, JVC has bundled an external PC Card CD-ROM drive. On the MP-XP7230GB, JVC has managed to cram in a wireless 802.11b card too, so hooking up to a wireless LAN should be no trouble at all.

With a price of £1,399, the Mini Note isn't the cheapest model on the market. The lower specified XP5230 comes in at £1,199 and, although it packs the same processor, you miss out on 128MB of RAM and the hard drive only stretches to 20GB. More importantly, you also lose the built-in wireless LAN adapter.

Verdict

If you want something that's small, lightweight and portable rather than bigger, better and faster then the expensive Mini Note is ideal. While it only offers adequate performance it more than makes up for it in size and weight. ■

Will Head

JVC Mini Note MP-XP7230GB

- ☐ JVC: 0870 330 5000
- ☐ www.jvc.co.uk
- ☐ £1,399 ex VAT

Specifications

933MHz ULV Mobile Pentium III; 256MB RAM; 30GB hard drive; 8.9in 1,024x600 screen; 2x USB 2.0 ports; 1x FireWire port; modem; 10/100 ethernet; 802.11b wireless LAN; 1x Type II PC Card slot; SD card slot; 225x152x29mm; 905g

Good points

Tiny; lightweight; nice design

Bad points

Not the best performance; expensive

Build quality

Features

Value for money

Budget notebook

ACI Centurion

We're seeing an influx of Intel's Centrino products this month and, not one to be left out, ACI sent us its brand-new Centurion budget notebook for review. This high-class model is packed to the rafters with good features and robustly designed to boot.

The Centurion tops most standards for its price bracket, including 512MB of DDR (double data rate) RAM, a 40GB hard drive and a Pentium M processor running at 1.3GHz. Despite its low clock speed, the system managed a respectable 115 in our WorldBench tests. With the full Centrino package on board, you'll also get the benefit of an 802.11b wireless adapter.

Centrino enables manufacturers to build slimmer, lighter models and this is reflected in the extremely thin build of the Centurion. You'd think at only 2.6kg this was a subnotebook, but it contains a sturdy full-sized keyboard and a brilliant 15.1in screen with a maximum resolution of 1,400x1,050.

Not only is this well protected by a very tough lid, it's also complemented by ATI's great 64MB Mobility Radeon 9000 graphics setup.

Aesthetically the Centurion might not be to everyone's taste because it doesn't have that plain 'office' finish. The back of the lid is a light silvery blue and, when opened, you can see the matt and polished metal effect inside. Don't be fooled, though – this model is the perfect workhorse. It's network ready, has Bluetooth capabilities, a combo DVD/CD-RW drive and is bundled with Windows XP Pro. ACI is also currently promoting the Centurion with a hard silver carrycase.

The warranty stretches to one-year collect-and-return protection and lifetime cover for labour.

Verdict

ACI has generously put a lot of goodies into its product and the Centurion offers great potential for both the home and business user thanks to its design and features list. At £1,249, though, it lacks the value for money offered by other notebooks on the market. ■

Spencer Dalziel

ACI Centurion

- ACI: 020 8830 1958
- www.aciplc.com
- £1,249 ex VAT

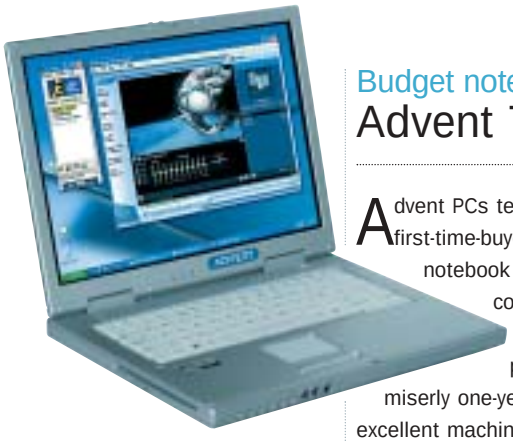
Specifications

1.3GHz Pentium M processor; 512MB DDR RAM; 40GB hard drive; 64MB ATI Mobility Radeon 9000 graphics; 15.1in 1,400x1,050 TFT display; 24x/10x/8x/8x combi CD-RW/DVD; 56k modem; lithium-ion battery; 330x273x29mm; 2.6kg

Build quality

Features

Value for money



Budget notebook

Advent 7018

Advent PCs tend to be low-cost, first-time-buyer systems but this budget notebook breaks the mould. The 7018 combines great features and specifications at a reasonable price. It is let down by the miserly one-year warranty, but it's still an excellent machine.

The 7018 comes with a 2.0GHz Mobile Pentium 4 twinned with 512MB of DDR (double data rate) RAM and a capacious 60GB hard drive. However, it doesn't pack as much performance as Intel's new Centrino (see above) or AMD's Mobile Athlons and this is reflected in its disappointing WorldBench score of 110. That said, this model will cope with most tasks you care to throw at it.

The first thing we noticed about the 7018 is that it's basically a rebadged Hi-Grade model. It has exactly the same chassis as the Hi-Grade Notino W6700-2000 (reviewed in the April 03 issue) but this is no bad thing at all.

The Advent 7018 is reminiscent of Apple's PowerBook design but isn't a tacky karaoke rendition – it's a well-designed, beautifully lightweight product that stands out from the crowd. The model accommodates a large 15.2in screen with a widescreen resolution of 1,200x854 and this is complemented by nVidia's 64MB GeForce 440 Go graphics card.

There's also a nice slot-loading combo DVD/ CD-RW drive on the righthand side and the 7018 has hardware buttons on the front so you can use the notebook as a CD player.

The Advent doesn't offer much in the way of ports – just two USB and one FireWire – and the lack of a floppy drive could prove inconvenient. However, Advent has thoughtfully bundled a copy of Microsoft's Works Suite.

Verdict

The 7018 should satisfy all types of users. As a home entertainment notebook there aren't many that can beat Advent's latest offering (if you've got the money to spend on it, that is) and we hope to see future models from Advent performing as well as this. ■

Spencer Dalziel

Advent 7018

- PC World: 01442 355 802
- www.pcworld.co.uk
- £1,154 ex VAT

Specifications

2.0GHz Mobile Pentium 4 processor: 512MB DDR RAM; 60GB hard drive; 64MB GeForce 440 Go graphics; 15.2in 1,200x854 TFT display; 24x/10x/8x/8x combi CD-RW/DVD; 56K modem; lithium-ion battery; 260x30x352mm; 2.7kg

Build quality

Features

Value for money

Professional digital SLR

Kodak DCS Pro 14n

It's long been the dream of photographic enthusiasts and professionals to have a digital SLR camera which combines ultra-high resolutions with uncompromised lens coverage. Now, after years of anticipation, they have the choice of two. Canon's 11Mp (megapixel) EOS-1Ds, tested last month, delivered the best digital camera images we'd ever seen. This month we got our hands on Kodak's DCS Pro 14n which ups the ante with a whopping 14Mp. Most amazingly of all, at £3,595, the 14n is almost half the price of the EOS-1Ds.

Keeping costs down

Kodak has kept costs comparatively low by basing the 14n on a mid-range film SLR – the Nikon F80 – while Canon based the EOS-1Ds on its own top-of-the-range EOS-1V SLR. The 14n is virtually the same overall size as the EOS-1Ds, but almost half the weight. Lighter is normally better, but the 14n's build quality and ergonomics don't feel as good as the incredibly solid EOS-1Ds.

Unsurprisingly, considering the bodies they're based on, the 14n is also less powerful than the EOS-1Ds in terms of high-end photographic control. The 14n will still satisfy the vast majority of SLR owners, but those used to Nikon F5s or Canon EOS-1Vs will find it handles more like an enthusiast's camera.

One bonus of using a non-professional body, though, is having a pop-up flash in addition to a hotshoe and PC Sync port. The 14n can also record voice annotations, although like other digital SLRs there are no movie modes. Unlike the EOS-1Ds, though, there is a composite video output for TVs.

As with other digital SLRs, the 14n's 2in screen is for image playback and menu control only, leaving the proper optical viewfinder for composition. There are two status LCDs and, surprisingly, a pair of media slots for either CompactFlash (Microdrive-compatible) or MMC cards. There's the choice of recording in JPG or 12bit RAW formats or having both saved at the same time, even on to separate cards if desired. Finally, there's a FireWire port for transferring images to your PC or Mac.

The really exciting thing about Kodak's 14n is its sensor. In terms of pure pixels it comfortably beats Canon's EOS-1Ds to become the world's highest resolution digital SLR. Like the EOS-1Ds, the 14n's sensor also matches the size of 35mm film, allowing lenses to deliver the same field of view as they would with a 35mm film camera. Earlier or cheaper digital SLRs have smaller sensors which effectively multiply all lens focal lengths by around 1.5 times.

The really exciting thing about Kodak's 14n is its sensor. In terms of pure pixels it comfortably beats Canon's EOS-1Ds to become the world's highest resolution digital SLR

Impressive results

Viewed in isolation, the 14n's images look great and are packed with detail which can be zoomed in on to the same degree as a good 35mm film scan. In this respect it's clearly an impressive piece of kit. When compared directly to the EOS-1Ds, though, our 14n JPGs suffered from smearing of the finest detail and slightly lower resolving power despite a higher megapixel count.

Forthcoming firmware updates might solve our issues but, judging by the models we tested, the pictures from the EOS-1Ds looked superior and, based on a higher-end body, it felt better too.

To be fair on Kodak, Canon's EOS-1Ds should excel considering it costs almost twice as much, but the 14n's specifications raised expectations for what could be an ultra-high resolution SLR at a comparatively affordable price. Firmware updates coupled with careful processing of RAW files may see the 14n deliver its full potential in the future, but as for shooting JPGs on our test model it was a case of getting what you pay for.

Verdict

As a full-frame 14Mp digital SLR for £3,595, Kodak's DCS Pro 14n is undeniably impressive, especially given Canon's 11Mp EOS-1Ds costs £6,000. While our 14n images were very good, we had hoped for better and ultimately it was outperformed by the EOS-1Ds. The 14n shows lots of promise, but we'll hold back to see if forthcoming firmware updates allow it to deliver the goods. ■

Gordon Laing

Kodak DCS Pro 14n

- ☐ Kodak: 01442 845 590
- ☐ www.kodak.com
- ☐ £3,595 ex VAT (body only)

Specifications

14Mp; 4,500x3,000 pixels output; 3:2 aspect ratio; takes most Nikon F mount lenses (not supplied); CompactFlash or MMC cards (not supplied); 4.5MB image at best JPG quality; 2in LCD and optical SLR viewfinder; rechargeable pack and recharger supplied; 131x158x89mm; 907g ex battery; 1-year warranty

Good points

Highest resolution digital SLR: 14Mp output roughly equivalent to 35mm film quality; considerably cheaper than nearest competitor; full-frame sensor allows lenses to perform as they would with a 35mm film camera

Bad points

Image quality beaten by Canon EOS-1Ds; 6Mp digital SLRs around three times cheaper and deliver sufficient quality; no movie mode capture facilities

Build quality

Features

Value for money

Intermediate digital camera
Samsung DigiMax V4

The DigiMax is the first digital camera we've reviewed from Samsung and we're very impressed with this powerful compact product. This camera excels in all the right places, offering great shots, ease of use, value for money and a host of features.

The V4 is a compact 4Mp (megapixel) CCD (charge-coupled device) camera with a maximum resolution of 2,272x1,704 and a 3x optical zoom that can be bumped up to 12x with the 4x digital zoom. Images can be saved as JPGs or TIFs and are stored on a 32MB SD (Secure Digital) card. You'll still need to purchase more memory to get the best from the DigiMax but, in a price range where most manufacturers provide a miserly 16MB, Samsung's offering is generous.

The battery is lithium-ion and, though it's not rechargeable, Samsung impresses again by making the DigiMax V4 compatible with nine types of power source. Pretty much any battery and an optional adapter can power this model, so you'll never be caught short.

For a camera that's aimed at the point-and-shoot market there are a lot of hardware buttons surrounding the quality 1.5in LCD. With several menus to navigate, the V4 may initially be daunting for a first-time user. However, it's easy to get to grips with and you'll soon appreciate the large number of shooting options. Different shooting presets, such as white balance, are provided but if you want to go fully manual you'll have control over ISO settings, exposure and aperture or shutter priority.

The DigiMax isn't hugely responsive and some of the colours are muted, but detail is extremely sharp. You can even tweak focusing to perfection with the best manual control option we've seen on a compact digicam.

Verdict

Not having directly reviewed a Samsung digital camera before, we didn't know what to expect so we were pleasantly surprised. The DigiMax V4 delivers on all fronts, has an affordable price tag and comes in a nicely designed package. A rare model that will satisfy all types of users. ■

Spencer Dalziel

Samsung DigiMax V4

- ☐ Samsung: 0845 922 3232
- ☐ www.samsungcamera.co.uk
- ☐ £330 ex VAT

Specifications

4Mp; max res 2,272x1,704; 32MB SD card; 3x optical zoom; 1 x lithium-ion battery; 106x38x55mm; 210g; max 675 photos on 16MB; min 12 photos on 32MB; 1-year warranty

Build quality

Features

Value for money

Beginner digital camera
Olympus MJU 300

Olympus has moved one of its most successful ultra-compact film cameras into the digital realm to create the MJU 300. It's touting this model as the first weatherproof metal-bodied digital camera, but it's a lot more besides.

This 3.2Mp (megapixel) model has a maximum resolution of 2,048x1,536 and a 3x optical zoom. The tiny XD storage card helped Olympus keep the camera small but the bundled 16MB only stores six JPG images at full resolution. It's nice to see a rechargeable lithium-ion battery bundled in such a small camera, though there's no mains adapter so you must use the battery charger provided.

Ultra-compact cameras are intended for travel and we do get riled when manufacturers build what is essentially a good camera around a cheap plastic body. However, the metal MJU 300 has been designed to take the strain of being knocked about in transit. This camera should therefore last a long time.

Olympus has kept the hardware buttons to a minimum so novices won't find the MJU daunting and, though this is essentially a point-and-shoot model, there are a decent number of options on the 1.5in LCD for taking shots under different conditions.

While most settings are automatic you have control over exposure compensation, white balance presets and six other shooting modes. We did notice that while the LCD screen is fine for composing shots when static it became quite blurry while panning and zooming.

Shot quality is impressive for such a compact model, especially at this price. Indoors, the colour scheme was a little soft but outdoor shots looked sharp and well coloured.

Verdict

The MJU 300 has a great combination of style and substance at an attractive price and couldn't be easier to get to grips with. If you want a sturdy digital camera to accompany you on your travels then this is it. ■

Spencer Dalziel

Olympus MJU 300

- ☐ Olympus: 0800 072 0070
- ☐ www.olympus.co.uk
- ☐ £288 ex VAT

Specifications

3.2Mp; max res 2,048x1,536; 16MB XD Card; 3x optical zoom; 1 x rechargeable lithium-ion battery; 99x34x56mm; 165g; 94/6 max/min photos on 16MB; 1-year warranty

Build quality

Features

Value for money

MP3 player

Slim Devices Slimp3

MP3 players are a great way to rediscover your music collection – no more choosing which CD to play, finding it then having to put it in the player. Any track in your entire collection is but a click away, providing you've got enough storage space.

The real Slimp3

Unfortunately, even with the 20GB or 30GB models that are available, space will eventually run out. Slim Devices' answer is an MP3 player that never fills up. The Slimp3 (pronounced 'Slim pE thrE', according to the website) doesn't actually store any MP3s itself – instead it streams them from the network.

At 216x51x64mm, the device is tiny. There's a two-line display for navigation and setup that also shows which track is playing at a particular time. Interaction is via the supplied remote control and round the back are connectors for the network, audio-out and power.

Setup is relatively simple, depending on how networked your home already is. Plug it into the line-in port of your stereo and hook it up to the network. If you don't already have a network setup then you'll need to invest in a network card for your PC. You'll also probably need to locate the Slimp3 fairly close to the PC in this case.

> No more choosing which CD to play, finding it then having to put it in the player. Any track in your entire collection is but a click away

Wired for sound

Once you've got it all wired you'll need to download and set up the Slimp3 server software. If your network is set up for DHCP (dynamic host configuration protocol) the Slimp3 will automatically find the server. If not you'll need to delve into manual configuration, although if you've already set up a home network this shouldn't be too taxing. It'll remember your settings, so you only have to input them once.

From here on in, you can play any files that the server knows about just by navigating with the remote control. The display is especially good and bright enough to read from a distance, so you won't need to even leave your seat to change tracks.

There's a handy synchronise option to link the playback of one machine to another. So, for instance, if you had one player in the lounge and another in the bedroom you could have them play the same files at the same time.

As the Slimp3 plays files from the server, the music will only be available when your PC is turned on. It's an obvious point, but one to consider in terms of how you'll use the device.

The Slimp3 only supports wired networks, which is a shame since wireless removes the need for messy cables. It would, however, increase costs whereas using a wireless bridge would achieve the same effect, albeit not quite so elegantly.

The player also only supports MP3, so if you have got music encoded in different formats it may not be ideal. Slim Devices has promised an upgrade to the server software that will support on-the-fly conversion of different formats to MP3 so the Slimp3 can play them back. However, this would invariably result in a reduction in sound quality and put a greater strain on the server.

Verdict

The Slimp3 finds a novel solution to the problem of storage constraints, providing almost limitless capacity depending on the size of your PC's hard disk. It's very easy to use and the design is more in line with consumer electronics than PC peripherals.

Make no mistake, however, this is a geek's toy. An extremely good, well designed toy, but a geek's toy nonetheless. If you don't already live in a networked home with a media server running 24/7 then you might be better off sticking to a conventional player. If, on the other hand, this sounds like the coolest thing ever and you've already got the infrastructure to support it, you're probably on the right track. ■

Will Head

Slim Devices Slimp3

- ☐ Procell Media: 01948 665 048
- ☐ www.slimdevices.com
- ☐ £179 ex VAT

Specifications

Network MP3 player; two-line VFD display; ethernet controller; line-out; DHCP support; supplied remote control; server PC required; 216x51x64mm

Good points

Virtually unlimited capacity; easy to use; great display

Bad points

Requires network infrastructure and dedicated server to get the most out of it

Build quality

Features

Value for money

Pocket PC handhelds

Toshiba e750 & e350

↖ The e750 comes with built-in Wi-Fi and the latest PXA255 processor

↑ The e350's sleek styling looks great and it won't ruin the line of your suit

Toshiba has introduced two new PDAs to its range – the high-end e750 and the budget e350. Both use Intel's latest XScale processor, the PXA255, which promises better performance and power management than its predecessor, the PXA250. This older chip is found in both the current top-of-the-range e740 and the low-cost e330.

Toshiba e750

The e750 has everything you could desire from a handheld device. It has a 400MHz PXA255 XScale processor; runs the Pocket PC operating system; has 64MB of RAM and 64MB of flash ROM; CompactFlash Type I or II and SD (Secure Digital) card slots plus integrated Wi-Fi.

The screen is 3.8in with a maximum resolution of 240x320, which ensures crystal-clear colour images. This is ideal as the PXA255 is optimised for multimedia and graphics-heavy applications – now we just need a few more for this platform to make it worthwhile. It supports 16bit audio and there is a headphone jack so the e750 could double up as a digital audio player, although there is no software installed for this as standard.

Thanks to the wealth of options onboard this isn't the lightest of handhelds at 197g, almost matching the bulky Dell Axim X5 (reviewed in our April 03 issue). But it has a sleeker, more attractive design. The finish is bright, matt silver, with four hotkeys on the front to take you to calendar, task, contacts and the home screen, plus a four-way navigation pad to complement the jogdial on the side of the device.

Its top-of-the-range features are matched by an equally high-end price. While £425 is pretty expensive, remember this hefty price tag does reflect the capabilities of the device so be sure you will make use of all the features before you shell out.

Toshiba e350

If the e750 is too heavy on your pocket, both in terms of weight and price, then the slimline, low-budget e350 might be worth a look. This shares a similar design to the e750, although the finish is dark grey and the colour screen is a little smaller at 3.5in. However, the resolution and clarity remain the same.

The price for this device is a much more wallet-friendly £212, but the lower cost does mean you miss out on some of the high-end features found in the e740. The processor is 100MHz slower at 300MHz, though it is still the latest PXA255 XScale model.

There's 64MB of RAM, but only 32MB of flash ROM, and there is no built-in Wi-Fi or CompactFlash slot, although there is a slot for SD cards. A headphone jack and 16bit audio are again built in, so this could be an even cheaper PDA and audio-player combo. Because the e350 is lighter on features it's also more portable and slimmer than its big brother.

> Toshiba's expertise shines through in both these devices, with excellent build quality and features for the price

Thanks to Dell's launch into the market and HP's revitalised iPaq strategy following the death of the Jornada, there are more desirable PDAs on the market than ever before. Even Palm is rumoured to be jumping on the XScale bandwagon with the forthcoming Tungsten C, although this is yet to get a launch date.

But despite the competition Toshiba's handhelds are still pretty attractive. The e750 is cheaper than its closest rivals, most of which don't have built-in Wi-Fi or the latest PXA255 processor. Meanwhile, the e350's styling is more attractive than the Axim X5's and it's both cheaper and faster than the iPaq h1910.

Verdict

Toshiba's expertise shines through in both these devices, with excellent build quality and features for the price. The only note of caution we would sound is with the e750. While it is an impressive device, it could be overkill unless you plan to regularly use your PDA over a wireless network – not the commonest scenario at the moment. The e350, on the other hand, is a low-cost PDA that won't ruin the line of your suit. ■

Ursula Seymour

Toshiba e750

- ☐ Toshiba: 0870 444 8944
- ☐ www.toshiba.co.uk
- ☐ £425 ex VAT

Specifications

400MHz Intel PXA255 XScale; 64MB SDRAM; 64MB flash ROM; 3.8in 240x320 colour screen; lithium-ion battery; USB cradle; Type I/II CompactFlash and SD card slots; infrared; built-in Wi-Fi; 16bit stereo sound; 197g; 80x125x16mm; 2-year warranty

Build quality

Features

Value for money

Toshiba e350

- ☐ Toshiba: 0870 444 8944
- ☐ www.toshiba.co.uk
- ☐ £212 ex VAT

Specifications

300MHz Intel PXA255 XScale; 64MB SDRAM; 16MB flash ROM; 3.5in 240x320 colour screen; lithium-ion battery; USB cradle; SD card slot; infrared; 16bit stereo sound; 149g; 80x125x12mm; 2-year warranty

Build quality

Features

Value for money

17in flat-panel display
Benq FP791

If you want a less bulky monitor with some extra features then Benq has come up with a brilliant answer in the shape of the FP791. This 17in flat-panel incorporates outstanding specifications that leave the competition for dust and has some interesting extras we've never seen before. We thought Benq would charge a small fortune for the FP791 but it doesn't cost an arm and a leg. And if that isn't enough to whet your appetite, the smart blue finish adds styling to the substance.

Generic TFT problems – lack of brightness and a blurry effect when displaying moving images – didn't materialise when we tested the FP791. The 450:1 contrast ratio twinned with the amazing 400 candelas created a luminescent display that could be viewed in direct sunlight and the 16ms response time meant sharp images without blurring. The maximum resolution of 1,280x1,024 at 75Hz is on a par with other 17in flat-panels and, though the dot pitch of 0.264mm isn't the best we've seen, the FP791 created extremely sharp black text and displayed a wonderful colour spectrum.

You can hook up the FP791 via DVI (digital visual interface) or the more common analogue VGA if you don't have a graphics card that supports the digital-to-digital connection. Choose DVI and the FP791 autocalibrates all the settings for you but opt for VGA and you can make manual tweaks with the onscreen display.

This screen is all about home entertainment, as demonstrated by the internal stereo speakers with SRS surround sound technology. Atop the display there's also a built-in multiformat storage card reader, so you can turn the FP791 into a digital photo frame. A TV tuner box that plugs into the USB port round the back comes as an optional extra.

Verdict

Though there's no swivel on the display and the viewing angle could be better, the FP791 still impressed us. It looks great and provides one of the best displays we've seen on a 17in flat-panel. A perfect option for home use that's well worth paying out for. ■

Spencer Dalziel

Benq FP791

- ☐ Benq: 01442 301 000
- ☐ www.dabs.com
- ☐ £495 ex VAT

Specifications

17in flat-panel; 1,280x1,024 max res; 0.264mm dot pitch; 450:1 contrast ratio; 140-degree viewing angle; 400cd/m²; 32bit colour; 3-year warranty; 451x192x443mm; 7.5kg

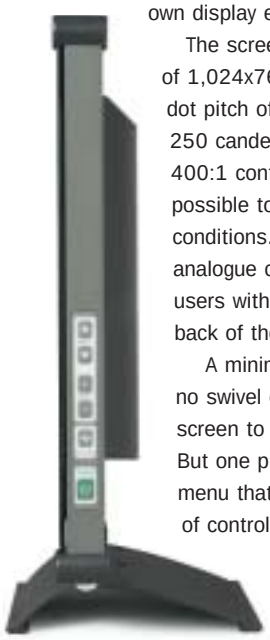
Build quality

Features

Value for money

15in flat-panel display
AG Neovo X215

The X215 is quite simply the sexiest flat-panel we've reviewed. There's a real lack of ostentation in the sleek minimalist design and the blue-tinted glass front serves a purpose beyond aesthetics, incorporating AG Neovo's own display enhancing technology.



The screen offers a maximum resolution of 1,024x768 twinned with a disappointing dot pitch of 0.297mm, but the average 250 candelas is boosted by a bright 400:1 contrast ratio. It's therefore possible to view the display in all lighting conditions. There's a choice of VGA analogue connection, S-Video or DVI for users with pure digital support on the back of their graphics cards.

A minimal features set means there's no swivel option – you can only tilt the screen to get the optimal viewing angle. But one plus is the comprehensive OSD menu that allows users a fair amount of control over display settings.

Our DisplayMate tests revealed a good image despite average specs. This may be due to AG Neovo's own technology. The crystal optic filter in the reinforced glass front reduces glare, increases the viewing angle and provides a better colour spectrum. You know you're looking at a quality display when you see the X215 but we'd like to know how well this model can perform with better specifications.

One thing that did stand out was the display's sheen. Most flat-panels have a matt finish to them but the X215 gives the impression you're viewing a CRT monitor rather than a flat-panel. Obviously the quality – especially the sharp text – degrades if you hook up via the VGA option, but it remains readable nonetheless.

Verdict

There are 15in flat-panels out there with more specifications per pound but none that performs as well. Besides, the X215 isn't just about image quality it's about impressing your clients with the coolest office hardware and in that respect the X215 can't fail. ■

Spencer Dalziel

AG Neovo X215

- ☐ Paysan: 01884 232 050
- ☐ www.paysan.co.uk
- ☐ £329 ex VAT

Specifications

15in flat-panel; 1,024x768 max res; 0.297mm dot pitch; 400:1 contrast ratio; 160-degree viewing angle; 250cd/m²; 32bit colour; 3-year ; 380x155x359mm; 4.9kg

Build quality

Features

Value for money

15in flat-panel display
NEC MultiSync 1560VM

NEC's latest MultiSync might not be breaking any technological boundaries in the 15in flat-panel market but it's a well produced model that offers great value for money. The 1560VM is thoughtfully designed with a bright colourful screen, sound environmentally friendly credentials and some decent extras.

With its long-neck stand that can be elevated or lowered to suit your position and its neat silver finish, the 1560VM sits well on the desktop. A maximum resolution of 1,024x768 is twinned with a below-par dot pitch of 0.297mm but it's the 300 candelas and 450:1 contrast ratio that really make the difference. They add a great intensity to the sRGB-compatible colour palette and this doesn't diminish when viewing the display in a bright room.

Connection is via a VGA analogue port or DVI (digital visual interface) so if you have a DVI port on your graphics card you get the benefits of autocalibration and sharper text definition. There's also a headphone socket and some built-in speakers but the sound quality is tinny.

DisplayMate tests demonstrated no ghosting or streaking and text definition proved to be sharp. We did notice some slight blurring on DVD movies but nothing that would interfere with your viewing pleasure.

Most flat-panels only pass the lower regulatory standards of TCO 95 so we were pleased to see stringent TCO 99 approval and a low power consumption of 35W on the 1560VM. We were also impressed with the Naviset software, which allows users to control all display settings via the Windows interface so you don't need to navigate controls on the OSD.

Verdict

The MultiSync 1560VM is one of the better budget flat-panels we have seen from NEC and it strikes a balance between performance and price. Those of you working to a budget but looking to save desktop space should check out the 1560VM. It won't disappoint. ■

Spencer Dalziel

NEC MultiSync 1560VM

- ☐ NEC-Mitsubishi: 0870 120 1160
- ☐ www.nec-mitsubishi.com
- ☐ £239 ex VAT

Specifications

15in flat-panel; 1,024x768 max res; 0.297mm dot pitch; 450:1 contrast ratio; 160-degree viewing angle; 300cd/m²; 32bit colour; 3-year warranty; 345x181x334mm; 5.1kg

Build quality

Features

Value for money

With its fast printing and outstanding colour quality, you'd expect the Phaser 8200 to cost a bundle. There's a new way to look at things.

The Phaser 8200 delivers super-rich colour in super-fast time. At 16 full colour pages per minute, it's 4 times faster than traditional colour laser printers. And with an industry-leading first page out time of just 9 seconds, you're likely to be finished before most other printers have even started. It's also very easy to install, load, use and manage. The solid ink technology

features drop in ink sticks, which can be topped up at any time without any wastage. Powered by a 300 MHz PowerPC processor and with true Adobe PostScript 3, the Phaser 8200 really does deliver a whole lot more. And with prices starting at just £1,140* you'll get it for a great deal less. **Call 0870 241 3245 or visit www.xerox.com/officeprinting/mon**

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*List price for Phaser 8200B configuration. Price quoted was correct at time of publication but may be subject to change. Reseller prices may vary.

External memory card reader

La Cie Universal Media Drive

With the number of storage card formats on the market increasing apace, choosing which one to purchase is no easy task. La Cie's Universal Media Drive at least takes away some of the guesswork for you as it supports all the current formats, ranging from CompactFlash, SmartMedia, Memory Stick and Microdrive to some of the newer types such as SD (Secure Digital) and MMC (Multimedia Card).

This is one of the most portable external card readers we've seen and will consume little more room on your desktop than the average mobile phone. You'll also need a USB cable (included in the package) to connect the Media Drive to the PC, so it loses out in terms of portability compared to all-in-one USB drives.

As with most flash memory drives, no power supply is required on the Media Drive and the smooth installation process is driverless on PCs with Windows XP or Me. Windows 98, 2000 and Mac users will need to take the driver CD with them, however.

When loaded, the La Cie adds four extra drive letters to your PC and copying files is as easy as dragging and dropping files to a floppy disk. You can also have several memory card types inserted at once so, for example, you won't have to remove a CompactFlash card before inserting an SD card.

The Media Drive offers perfectly satisfactory performance, albeit using a USB 1.1 interface, and after running some tests on a standard notebook PC we were able to transfer 30MB of data to CompactFlash and SmartMedia in 49 and 71 seconds respectively.

Verdict

At £19, the La Cie is an incredible bargain. It may not be quite as portable as an all-in-one USB drive, but if you're working with flash memory this is an excellent reader that offers trouble-free support for all six major formats in one device. Plus with the La Cie you won't be forced to predict which of the formats will take off and which will fall by the wayside. ■

Robin Morris

La Cie Universal Media Drive

- ☐ La Cie: 020 7872 8000
- ☐ www.lacie.co.uk
- ☐ £19 ex VAT

Specifications

External USB media card reader; USB 1.1; 105x60x15mm; 85g; reads CompactFlash, Microdrive, SmartMedia, Secure Digital, Multimedia Card and Memory Stick

Build quality

Features

Value for money

Portable DVD player and CD rewriter

Philips JackRabbit JR32RWDV

Since their introduction DVD players have fallen drastically in price. Once expensive high-end items found in specialist shops, you can now pick one up in a supermarket for around £50.

Philips is no doubt hoping the same sort of mass adoption will occur as portable DVD players rise in popularity. Already, there's a marked increase in the number of cross-country commuters using the onboard DVD facilities of their laptops, so it makes sense for Philips to launch a sub-£200 carry-around player.

Portable DVD players have been selling for the past couple of years, but the JackRabbit doesn't simply play prerecorded digital discs – when connected to a PC it doubles as a CD rewriter. It's capable of 32-speed recording and 10-speed rewriting and it reads DVD discs at a more than respectable 12-speed as long as your PC is USB 2.0-enabled.

Otherwise you get quad-speed writing and rewriting, while CDs are read at six-speed and DVD discs top-out at single-speed. Philips supplies Roxio's Easy CD Creator to assist with the recording process. Connections include S-Video and composite video and you can plug in headphones for private use. You can also hook it up to your stereo system instead or create a slideshow on your TV screen using digital images stored on CD or DVD. You do need to be near a power source, however, which limits its use as a truly portable player.

The JackRabbit performs equally well as a CD writer or DVD player, although if you plan to use the latter function you'll need an external screen as there's no built-in display. There's also a bundled palm-sized remote, so you won't need to get up to operate the DVD player.

Verdict

The JackRabbit is the sort of sleek device you'll want to have on display in your living room. It will look great partnered with your widescreen TV or a flat-panel PC screen and its smart tailoring belies its relatively low cost. The CD writer makes it a good companion for PC users, but the lack of internal battery or screen limit its use as a truly portable product. ■

Rosemary Haworth

Philips JackRabbit JR32RWDV

- ☐ Philips: 0870 601 0101
- ☐ www.philips.co.uk
- ☐ £169 ex VAT

Specifications

Portable CD-RW drive & DVD player; works with Windows 98 SE/Me/2000 Pro/XP; 40x/32x/10x CD read/write/rewrite speed; 12x DVD read speed; USB 1.1/2.0 interface; S-Video, composite video connections and SPDIF digital connections; 5.1 surround sound support; remote control and AAA batteries supplied; flash upgradable; 130x174x34mm; 630g; 2-year warranty

Build quality

Features

Value for money

Graphics card

MSI FX5200

At first glance the FX5200 seems to offer the features of its big brother, the FX5800, at a quarter of the price. MSI has also added a great games bundle plus the ability to tap into such features as desktop television and radio coverage through a remote control unit. With such promise, how can the card fail?

Although the GeForce4 products still offer plenty of speed, they can't support the advanced DirectX 9.0 features necessary to get the most out of the majority of new games. Thankfully, nVidia has put this right with the FX5200 and its pixel and vertex shaders offer such advanced graphics capabilities that they go beyond even what's currently supported through DirectX 9.0.

In theory, therefore, the FX5200 packs a bigger visual punch than the Radeon 9700 Pro. Other highlights include the 128bit colour quality and 8x AGP.

Inevitably, though, the story behind the specifications is less rosy. While these graphics features look great on paper, you still need the necessary hardware to make the most of them. Perhaps most scandalous of all is the lack of Intellisample Full Scene Anti-Aliasing optimisation, meaning the potential graphics quality is dramatically reduced.

All of this culminates in a card that fails to post the necessary frame rates. Even at a relatively low resolution of 1,024x768 this card struggled to generate a third of the speed of the FX5800. It had difficulty beating even the Radeon 9000 Pro in most of our tests and you can expect the upcoming Radeon 9100 to prove the superior product.

Verdict

The MSI FX5200 is a budget card, but it's still not cheap enough. Even at a modest resolution, playing many of the latest games is going to be a frustrating experience with the FX5200. DVI and multiple monitor support is good, but if you want a card that'll make short work of games titles you really need to be saving up for the Radeon 9600 or GeForce4 Ti 4200. ■

Robin Morris

MSI FX5200

- ☐ Scan: 0870 755 4747
- ☐ www.msi.com.tw
- ☐ £76 ex VAT

Specifications

nVidia GeForce FX 5200; 128MB DDR RAM; 350MHz Ramdac; AGP 8x; max res 2,048x1,536 at 75Hz; DirectX 9.0; DVI; TV-out; 2-year warranty

Build quality

Features

Value for money

With 2400dpi* providing an exceptionally detailed palette, the Phaser 6200 colour printer delivers eye-catching quality. There's a new way to look at things.

For documents that give a great impression, the Phaser 6200 provides outstanding text and graphics delivery at a remarkable16 pages per minute in full colour. The 500 MHz processor delivers incredible colour resolution at 2400dpi*, coupling quality and speed to offer the best performance in its class. In addition, Automatic Image Control ensures consistent high print quality and guaranteed colour performance from first page to last. All this in a printer that's easy to both use and manage – impressive! **Call 0870 241 3245 or visit www.xerox.com/officeprinting/mon**

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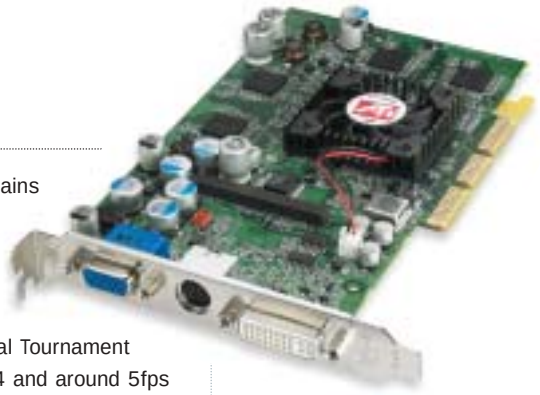
Graphics card
ATI Radeon 9600 Pro



Despite all the hype surrounding the ATI Radeon 9700 and 9800 Pro chips, for the average user the 9600 is where the interest really lies. Costing around half the price of its more sophisticated siblings, this card is cheap enough to be affordable, but theoretically powerful enough to make an accomplished job of showcasing the latest games.

Indeed, in some respects it even goes beyond the capabilities of the more expensive cards and, in contrast to the 0.15 micron process used to manufacture the 9700 Pro, the 9600 Pro's 0.13 microns means that it should be able to achieve high speeds at cooler temperatures.

HyperZ III+ is another improvement that uses advanced compression techniques to get the most from the 9600's slightly limited memory bandwidth. Little is given away in terms of chip speed, and the 9600 is clocked at a heady 400MHz, allowing it to hit some high frame rates.

With such potential, this card should have waltzed past the now ageing Radeon 9500 and nVidia Ti 4200 products, but it only just squeezed ahead of the 9500, and on frame rates alone the Ti 4200 remains the dominant force.

Admittedly the differences are fairly small – amounting to 6-8fps (frames per second) in Unreal Tournament 2003, 2-3fps in Comanche 4 and around 5fps in Aquamark – and thanks to the inclusion of SmoothVision 2.1, the 9600's Full Scene Anti-Aliasing abilities are unsurpassed. The board's visuals are strong as well and, when you throw in the DirectX 9.0 support, the 9600 is clearly a better bet than the Ti 4200.

Verdict

Exact pricing for the 9600 wasn't available at press time, but expect cards to retail for around £110 to £120. At this level, the 9600 Pro is value for money. Its performance may not be as impressive as expected, but it will still give an enjoyable playing experience in the upcoming crop of DirectX 9.0 games at or below a 1,280x 1,024 resolution. Add to that the quality of the visuals, and you have a card that offers more than enough to attract the gamer on a budget. ■

Robin Morris

ATI Radeon 9600 Pro

- ☐ www.atitech.com
- ☐ £110-£120 ex VAT

Specifications

ATI Radeon 9600 Pro; 128MB DDR RAM; 400MHz Ramdac; 8x AGP; 2,048x1,536 max res at 75Hz; 9x DirectX; DVI; TV-out; 3-year warranty

Build quality

Features

Value for money

Digital camcorder
Canon MV650i

Until the move to digital, home videos were the 90s equivalent of slideshow hell. Now, though, anyone with a reasonably high-spec PC can cut their videos down to a decent length and edit out the lowlights.

Of course you still need something on which to capture your footage, and Canon's MV650i is one such contender. It's not the smallest camcorder you'll find but it's not too large to stow in your luggage.

Like most camcorders it's designed for righthanded use, with the main functions (record, zoom and so on) just a thumb-push away. Further configuration buttons are hidden under the 2.5in fold-out LCD display. There are also transport buttons for the VCR above the screen, which can be lit in green, orange, blue, yellow, turquoise or purple depending on your preference. If you like to customise your camcorder, then the MV650i is more than happy to oblige.

Canon's model uses MiniDV, and we found the quality of recorded footage to be good. The device can be slow to focus, especially when zoomed, but we did find at the length of the zoom (22x maximum) it refused to focus at all. Bring it back a bit, though, and it is fine again.

There's also a SD (Secure Digital) card slot at the bottom so you can store images and even short video clips. Quite why you'd want to store jerky, low-resolution clips on the card when you've got a perfectly good camcorder at your disposal is a bit of a mystery, however.

The 'i' at the end of the models name denotes the DV-in feature, which allows you to record any edited footage back on to DV tape.

Verdict

The MV650i is an easy-to-use, reasonably sized and affordable camcorder. We did have a couple of problems with autofocus at the maximum zoom, but other than that it performed well. If you're looking for your first camera but don't want to break the bank the MV650i is a worthy contender. ■

Will Head

Canon MV650i

- ☐ Canon: 08705 143 723
- ☐ www.canon.co.uk
- ☐ £638 ex VAT

Specifications

MiniDV camcorder; 800,000 pixel CCD; 22x optical zoom (440x digital); image stabiliser; 2.5in LCD, colour viewfinder; SD card slot; DV in/out; USB; 58x147x103mm (wxdxh); 520g

Build quality

Features

Value for money

Inkjet printer

Epson Photo Stylus 830U

A tweaked version of the discontinued Photo Stylus 830, the 830U has one or two extra features. Its silver and black finish and small footprint give the 830U a stylish feel and, while it's not pricey, running costs do shoot up when you're not printing in draft mode.

USB 1.1 makes setup simple, and there's another USB connection near the front for hooking up Epson's PhotoPC L-200 and L-300 digital cameras for direct printing. Epson has again opted to quote the optimised 5,760x 1,440dpi resolution rather than give away the hardware figures, but this probably won't bother first-time users after a simple interface.

The print utility couldn't be easier with settings for draft, text and photo modes, though, to be fair, you can access advanced options if you're feeling a bit adventurous and control a wealth of manual configurations.

We couldn't get near the quoted print speeds of 14ppm (pages per minute) for monochrome and 13.7ppm for colour but managed 8ppm and 6ppm respectively – no speed demon but then pace isn't really a priority for home users.

Image quality is fine on all settings except for draft and here lies the problem. Running costs are tabulated on draft mode printing but it's unlikely anyone will use draft mode on the 830U – it's too light and there's too much banding.

Increase the resolution and the extra ink pushes running costs up. Print some photos and it really starts to get expensive.

Draft mode printing costs 4p per page for mono and 8p for colour pages but the cartridges last quite a while. To be fair, this is primarily a photo printer and we can't quibble with the results – this is impressive photo printing on an entry-level model with brilliant colours and attention to detail.

Verdict

If you avoid printing in draft mode you won't be disappointed with the Epson Photo Stylus 830U. Anyone new to photo printing will appreciate how easy this model is to use and will be impressed with the photo image quality. Just watch out for the ink costs. ■

Spencer Dalziel

Epson Photo Stylus 830U

- ☐ Epson: 0800 220 546
- ☐ www.epson.co.uk
- ☐ £99 ex VAT

Specifications

14ppm monochrome; 13.7ppm colour; 5,760x1,440 optimised resolution; USB connection only; 4p/8p per page mono/colour; 100-sheet A4 input tray 477x258x 181mm (wxdxh); 3.42kg; 1-year warranty

Build quality

Features

Value for money

Multifunction device

HP PSC 1205

The explosion of digital imaging has created a new niche for multifunction devices (MFDs). For home users wanting a low-cost all-in-one solution, it looks like HP has answered their prayers. We can't believe this product is only £85 ex VAT – for the price alone it's well worth our Gold award.

The PSC 1205 is a remarkably small model that looks like a printer but comes with scanning and copying functions. It connects to a PC via USB and HP makes installing the necessary software easy. Though there's no LCD on the front there are eight colour-coded buttons on the lefthand side for manual configurations.

The print functionality isn't bad at all and that's because it utilises the same cartridges and print engine as most other entry-level HP printers. It has a maximum resolution of 600x600dpi for black text and as soon as you select photo printing this increases to an optimised 4,800x1,200dpi using HP's older Photo Ret III technology.

At least draft mode printing is usable, which is just as well because running costs are quite expensive – nearly five pence per page for text and almost eight pence for colour. But the colour cartridge can stretch to printing 400 A4 pages or 125 photos. Our results demonstrated that the PSC 1205 had no problem with sharp text and the photo quality output was reasonable.

Scanning and copying are possible up to 600x1,200dpi and the 36bit colour depth is adequate enough for storing your existing photo album. We scanned a colour photo on the maximum resolution and, though it was extremely slow, the results were pretty good.

Verdict

This really is a great solution for first-time home users on a strict budget who don't want the hassle of separate peripherals. Sure, the photo quality output isn't top notch but you can't complain if you're paying such little money for something with so much functionality. ■

Spencer Dalziel

HP PSC 1250

- ☐ HP: 0870 547 4747
- ☐ www.hp.com
- ☐ £85 ex VAT

Specifications

12ppm monochrome; 10ppm colour; 600x600dpi; 4,800x1,200 optimised resolution; scanner maximum resolution 600x1,200 optical dpi; 36bit colour depth; 600x1,200dpi colour copy; USB connection only; 4.8p/7.6p per page mono/colour; 100-sheet A4 input tray; 426x 260x170mm (wxdxh); 4.2kg; 1-year warranty

Build quality

Features

Value for money

Mono laser printer
Oki B4300N

Oki produces a good line of robust mono laser printers and the B4300N is a great addition to the range. The new 4000 series replaces Oki's ex Best Buy, the OkiPage 14ex model, so we had high expectations for this entry. And it didn't disappoint.

Don't let the B4300N's compact size belie the fact that this is an extremely powerful model that's a well-priced choice for an office with heavy printing needs.

The B4300N is the network-ready version of this model so it's a little more expensive than the base unit, but worth the extra cost. It provides a maximum resolution of 600x1,200 and can churn out 18ppm (pages per minute) which we managed to match in our Test Centre.

Oki also claims a first-page-out time of 6.2 seconds; we could only get 8.5 seconds but that's still fast so there won't be any print queues if you have several people using the B4300N. It comes with 16MB of memory and a pretty good paper handling capacity that can be increased with an optional tray.

Setting up is perhaps not as straightforward as we would have liked. The process is only fully automatic if you're using the parallel connection. Users intending to hook up with USB 2.0 have to make a manual choice between three different drivers and it's not completely clear which is the best one to pick.

Once it was up and running, however, the B4300N had no problems. Text is clearly defined even in draft mode though cross-hatching shows up on black headings. But bump up the quality and this disappears. We noticed hardly any slow-down when printing complicated graphics at the maximum resolution, so the B4300N has no trouble coping with difficult workloads. Add to this some of the best running costs we've seen and you have a quality product.

Verdict

The B4300N looks like a personal printer but has the performance levels of a mid-range workgroup mono laser. It might be a bit more expensive than some of the other printers in its class, but you get superb running costs and ease of use combined with decent functionality and quality performance. ■

Spencer Dalziel

Oki B4300N

- ☐ Oki: 01753 819 819
- ☐ www.oki.co.uk
- ☐ £379 ex VAT

Specifications

18ppm monochrome; 600x1,200; USB 2.0 or parallel; 16MB/48MB max; 0.7p per page mono; network ready; 250 A4 page input tray 355x395x200mm (wxdxh); 9kg; 1-year warranty

Build quality

Features

Value for money

GPRS data card
Vodafone Mobile Direct

If you need to access data when you're on the move then by far the most realistic, reliable and economic option is the mobile network. Juggling a mobile and notebook, however, while trying to write that all-important email, can be troublesome, which is where slot-in mobile data cards come in.

Vodafone's Mobile Direct stands out because – as you would expect from a major player like Vodafone – it comes in a hassle-free integrated package of GPRS PC Card, SIM card and services, and is a doddle to get running.

Setup takes less than 10 minutes and the software dashboard for your laptop provides access to email, browser, SMS, MSN Messenger and a usage meter so you can see what your charges will be.

You can, of course, use the card as a simple modem and run your usual email client. We used Mobile Direct as a fall-back communications device while reporting on the CeBit Exhibition in Germany, and from a bedroom in Badenstedt it was a lifesaver. If you're used to dialup speeds it won't seem slow, but if you're used to broadband or leased line speeds it will crawl.

Monthly contract charges are divided into three categories for low, medium and high usage. The more you pay, the more megabytes you get inclusive and the less you pay per megabyte thereafter.

It will work with any operator's GPRS SIM card – it doesn't have to be Vodafone's.

There's also a virtual private network version, enabling you to access files as if connected directly to your company's LAN. Setting up the back office software should take five hours, according to Vodafone.

Verdict

GPRS data is invaluable for the dedicated road warrior but it's only to be used if you can't get email access from a network. Mobile Direct is very easy to set up and provides a useful range of features at an affordable monthly cost. ■

Andrew Charlesworth

Vodafone Mobile Direct

- ☐ Vodafone: 08080 741 741
- ☐ www.vodafone.co.uk
- ☐ £123 ex VAT for the card, low usage contract is £5 a month for 3MB/month of data transferred, plus £2 per MB thereafter

Specifications

Windows 98/98 SE/XP/2000/Me/NT 4.0; Type II PC Card; theoretical maximum data transfer speed 45Kbps; requires 24MB system memory

Build quality

Features

Value for money