

Pocket PC-based personal digital assistant Toshiba Pocket PC e310

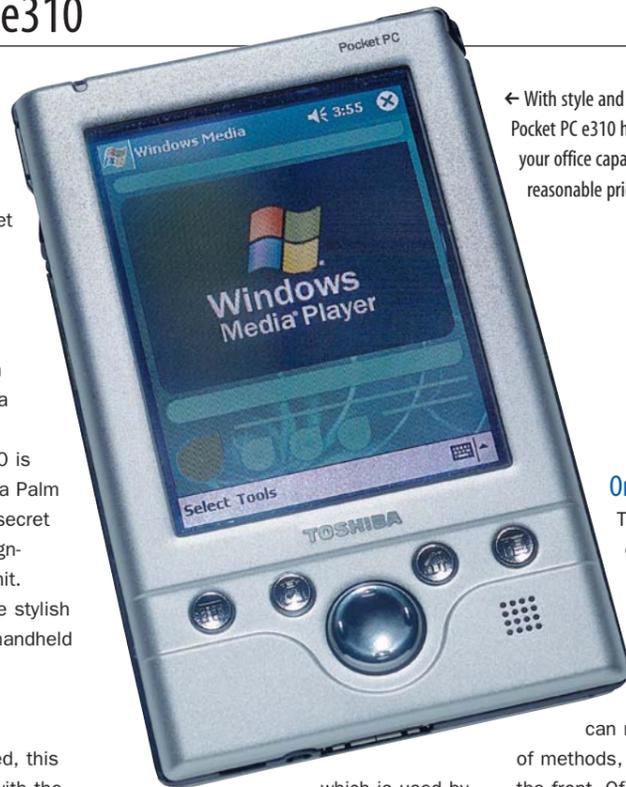
When it comes to choosing a PDA (personal digital assistant) you might want the functionality offered by a Pocket PC-based device but be put off by the high price and bulky design of many units. Toshiba's new e310 makes this trade-off a thing of the past, providing a Pocket PC PDA in a slim, lightweight chassis and at a very reasonable price.

Our first impression of the e310 is that it looks remarkably similar to a Palm device, and Toshiba is making no secret of its desire to target a more design-conscious market with its latest unit. There's no doubt that it is far more stylish than Toshiba's last foray into the handheld market, the e570.

All the trimmings

As far as dimensions are concerned, this offering has far more in common with the latest Palm than its elder sibling. The Toshiba e310 weighs in at 140g, just 1g more than the Palm m515, and its measurements of 80x125x12mm mean it is slightly thinner, too. We preferred its matt silver magnesium case, although there is no protective screen cover so when you aren't working on it you'll have to use its black-and-silver faux leather pouch to keep it safe.

To keep the e310 so trim Toshiba has dispensed with a Type II CompactFlash slot (as found on the e570) in favour of the SD (Secure Digital) expansion method,



← With style and functionality to spare, the new Toshiba Pocket PC e310 has a lot to offer if you want to take your office capabilities on the road, and all at a very reasonable price

On the menu

The applications supplied on the Toshiba comprise the usual Pocket PC bundle, including Pocket Word and Excel, plus a contact manager, to-do list, calendar and so on. You can navigate them via a variety

of methods, including the five buttons on the front. Of these, four hotkeys take you directly to the calendar, contacts list, to-do list and home page, and a large central button allows you to access menus and so on. There is also a dial on the side of the device, similar to the jogdial found on Sony's mobile phones and PDAs, which lets you scroll around the screen. Text input is made either by using the onscreen keyboard or by handwriting recognition.

You can add in Bluetooth support by using an SD (Secure Digital) card and, unlike the e570, Toshiba has enabled the e310 for Bluetooth synchronising with a PC. Otherwise you synchronise via a USB (universal serial bus) cradle, although one neat touch is a separate power adapter, so you can take the e310 travelling with you without the need to lug the cradle around too.

Verdict

The Toshiba e310 is a seriously smart PDA that offers all the up-to-the minute heavyweight features in an attractive slimline chassis. The combination of power and petite good looks should make this PDA a real winner. ■

Ursula Seymour

which is used by Palm devices. Unfortunately this means that storage is more limited. The e310 also has less onboard memory than the e570, with 32MB of RAM and 32MB of ROM, but the price has fallen accordingly. In fact, the Toshiba e310 is the cheapest Pocket PC device you can buy and is even £1 cheaper than the Palm m515, making it really good value.

Pocket features

Despite the e310's low price there is no compromise on features. The 3.5in reflective colour LCD (liquid crystal display) screen is bright and offers a maximum resolution of 240x320, making it much more impressive than Palm's 160x160 offering. It uses a 206MHz StrongARM processor, the same chip that powers the e570, and has a lithium-ion battery which Toshiba claims has a 10-hour life.

Another boost to the specification is Toshiba's built-in MP3 player and voice recorder. You can play back audio memos through the speaker supplied, and there's a headphone jack for listening to music. You can even use the e310 to play Mpeg movies.

Toshiba Pocket PC e310

Specifications: 206MHz StrongARM; 32MB RAM; 32MB ROM; 3.5in 240x320 TFT; SD slot; microphone jack; speaker; MP3 player; voice recorder; Pocket PC 2002; USB; lithium-ion battery; 80x125x12mm; 140g.

Toshiba: 01932 828 828
Website: www.toshiba.co.uk
Price: £314 ex VAT; Bluetooth card £125 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										
9										
Features										
9										
Value for money										
9										



Budget PC Hi-Grade Ultis PV4 C17PA7

Intel's lower-end processor range. With its new 1.7GHz Celeron chip, the Hi-Grade Ultis fared miserably in our WorldBench tests, its score of 94 making a mockery of the £851 price tag. This performance is roughly what we would expect from a moderately configured 1GHz AMD Duron PC. But for this price, and with Hi-Grade filling the PC with an otherwise good selection of components, the Ultis should have delivered far more.

Take, for example, the graphics subsystem, a strong pairing that teams LG's colourful 17in Flatron 775FT monitor with a 64MB ATI Radeon 8500 card. The latter is a card to rival nVidia's offerings. The 256MB of DDR (double data rate) RAM is fairly good, and although the Maxtor hard drive seems modest in comparison to the huge drives seen on some PCs, 60GB is still ample storage space and shouldn't fill in a hurry.

The C-Media sound card is a little disappointing, although the Creative DTT2200 speaker system guarantees high audio quality. The CD writer is up to scratch, with 24-/10-speed CD-R/CD-RW facilities, plus a 16-speed DVD-ROM drive. Attractive extras include a TV tuner, four USB (universal serial bus) and two FireWire ports. Internally, the Hi-Grade is spacious and well arranged, and the inclusion of not one but two 5.25in drive slots is a welcome surprise in the budget category.

Verdict

With the Ultis, Hi-Grade has made the most of a substandard processor, but at this price this Celeron-powered PC can't justify its place in the bargain-basement Superbudget chart. Customers with £851 to spend should aim to get more for their money. ■

Robin Morris

Hi-Grade Ultis PV4 C17PA7

Specifications: 1.7GHz Intel Celeron; 256MB DDR RAM; 60GB hard drive; 40x/24x/10x CD-RW; 16x DVD-ROM; 17in monitor; Windows XP Home.

Hi-Grade: 020 8532 6100
Website: www.higrade.com
Price: £851 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										
8										
Features										
7										
Value for money										
5										

Budget PC Systemax Reliance P2260E

PC ADVISOR The 2.2GHz Pentium 4, though not competing well with the Athlons at the Power level, gets a chance to shine in the Budget bracket. Here the Systemax Reliance's WorldBench score of 116 is extremely acceptable considering the mere 256MB of DDR (double data rate) RAM onboard.

Where the Pentium 4 does have an edge is in terms of graphics performance,

and the P2260E is blessed with nVidia's 64MB GeForce4 Ti 4200 card. Despite being the slowest of the new Titanium family, the 4200 performed strongly in our games tests.

Balanced throughout, there's little evidence of cost-cutting in the £999 Systemax Reliance. The IBM hard drive is a capacious 80GB – it's better to have too much storage than too little. Also excellent is the P2260E's sound system, pairing Creative's Audigy card with the Videologic ZXR-500 speakers, while the Samsung 16-speed DVD-ROM and 40-/24-/10-speed (read/write/rewrite) CD-RW drives are perfectly adequate.

We could complain that a 19in monitor is preferable. However, when the screen is CTX's 17in PR705F, this argument falls flat. Internally, the Reliance feels cramped,

and more in the way of software or instructions would have been appreciated.

Verdict

No PC is without its faults, but the Systemax lands its hardest punches in all the right places, demonstrating that you can still build an impressive PC around the Intel Pentium 4 processor. ■

Robin Morris

Systemax Reliance P2260E

Specifications: 2.2GHz Intel Pentium 4; 256MB DDR RAM; 80GB hard drive; 40x/24x/10x CD-RW; 16x DVD-ROM; 17in monitor; Windows XP Home.

Systemax: 0870 729 7364
Website: www.systemaxpc.co.uk
Price: £999 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality										
7										
Features										
8										
Value for money										
8										

Graphics card

Gainward GeForce4 Ultra/700 XP Golden Sample



Another month, another Recommended award for German graphics giant Gainward. When a graphics card wields the processing power of the GeForce4 Ti family, it's hard not to recommend it. The highly efficient memory management, the stunning image quality of the nFinite-FX II engine and the enviable anti-aliasing

facilities guarantee results. That the chip is the Ti 4400 rather than the top-of-the-range 4600 makes little difference in practice and the 128MB of memory is a sign that this card can compete at the highest level.

The card's nView facilities allow users to double the size of their Windows workspace by connecting a second monitor. The latter can be either analogue or digital, thanks to the inclusion of a DVI (digital visual interface) connector and RGB converter. An advanced video-in/out connector and WinProducer, a video-editing package, add extra value.

Gainward's Golden Sample rating is a sign that the GeForce4 has passed the most rigorous testing schedules, and is capable of running at top speeds. The 4400 was streets ahead of the Radeon 8500 in our games tests, producing a searing 181fps (frames per second) in our



Quake III tests at 1,024x768, and topping 140fps even at 1,600x1,200. Only the top-of-the-range 4600 cards beat this performance, and then there was only a few frames in it.

Verdict

Value for money is a relative term and there's no denying that, even though £245 makes this one of the cheaper GeForce4 cards, it's still a lot of money. Having said that, exceptional technology never comes cheap, and for a gamer intending to take their PC to the next level, this would make a first-class upgrade. ■

Robin Morris

Gainward GeForce4 Ultra/700 XP		2 TOP 10
Specifications: nVidia GeForce4 Ti 4400; 128MB DDR RAM; 350MHz Ramdac; 4x AGP; 2,048x1,536@75Hz; 16.7 million colours@800x600; 1xDVI; video-in/-out; three-year warranty.		
Watford: 0870 220 0700 Website: www.gainward.de Price: £245 ex VAT		
Build quality	8	
Features	9	
Value for money	7	

Personal inkjet printer

Lexmark Z55 Color JetPrinter



The Z55 may be overshadowed on paper by its more advanced relative, the Lexmark Z65 (see the Personal inkjets chart on page 128), but it offers similar performance at a lower price. In fact, for older PCs the Z55 offers the advantage of a parallel port connection; the inclusion of a USB (universal serial bus)

cable is a bonus too. Installation is smooth, and the clear driver lends easy access to the solid range of functions.

As with the Z65, the Z55's in-depth specifications aren't matched in real-world testing. At top speed, the Lexmark can generate 9ppm (pages per minute) of text and 7.5ppm of colour graphics. As with the Z65, though, the low-calibre image quality will force you to resort to the colourful but slower standard resolution. Here, the Z55 almost matches the Z65 in terms of both image quality and speed. The printer may support a resolution of 3,600x1,200dpi (dots per inch) on glossy media, or 3,600x600dpi using standard paper, but the dark and indistinguished colour palette falls just short of the Z65's results.

How much the Z55 will cost you depends on what documents you print. At 4.9p a page, colour printing is cheaper



than on other more expensive models. However, at 4.3p a page, monochrome text printing is much less affordable.

Verdict

The Z65 might have outstanding specifications, but the Z55 is all but its equal in real-world testing. Offering almost the same level of image quality and near-identical speeds in the important areas, the Z55 competes well with its sibling while costing £26 less. ■

Lexmark Z55 Color JetPrinter		2 TOP 10
Specifications: 9ppm mono (17 quoted); 7.5ppm colour (13 quoted); max res 3,600x1,200dpi (glossy) 3,600x600dpi (standard); USB & parallel; 600-page black cartridge £25.94; 450-page colour cartridge £22.23; 440x318x197mm; 3.3kg.		
Lexmark: 0870 444 0044 Website: www.lexmark.co.uk Price: £84 ex VAT		
Build quality	8	
Features	8	
Value for money	9	

CD-RW drives

Teac CD-W540EK and LG GCE-8400B

Teac and LG have raised the bar yet again with a pair of revolutionary CD-RW (rewritable) drives that effortlessly outclass the previous 32-speed models. Offering CD-R (recordable) rates of up to 40-speed, these two drives are pushing existing technology to its extremes.

This incredibly fast writing is achievable partly because the drives write to CD-R discs using the advanced P-CAV/Z-CAV technology. Under the standard CAV (constant angular velocity) process, a CD is read at the same speed all the way across the disc. However, as the drive has to spin a lot faster on the inner tracks of the disc, errors tend to pile up as the speed increases. P-CAV/Z-CAV drives avoid this problem by reading the outer part of the CD at a different speed to the inner. You won't necessarily get 40-speed performance the whole time but, as these two drives demonstrate, burning technology continues to surge forwards.

Teac CD-W540EK

Teac drives invariably deliver blistering performance, even if their price isn't always the most



alluring. The CD-W540EK displays plenty of flair, and contains a slew of advanced features designed to deliver a consistently high level of performance. Not the least of these is the 48-speed reading and, even as a straight CD-ROM drive, the Teac can hold its own.

Teac has solved the problems of extreme spinning speeds by introducing a FineFocus control to keep the laser correctly positioned, while the Intelligent Speed Control feature assesses each CD individually to determine the highest writing speed available without risking errors. WriteProof technology and an 8MB data buffer are also useful additions.

In operation, these measures appear to work beautifully, and the Teac copied both CD-Rs and CD-RWs without missing a beat. The swift write times eclipsed previous drives, and just two minutes 17 seconds were required to write 350MB of files to disc in CD-R mode. CD-RW performance was scarcely less impressive, needing only four minutes and 39 seconds at 12-speed.

It's good to see the Teac supporting the Mount Rainier (CD-MRW) standard.

By regulating the formatting of CD-RW discs, this should make them work consistently on every drive, allowing you to copy files to and from media as easily as you would with a floppy disk. Otherwise, the solid software bundle includes the Feurio Audio CD program and Virtual CD, while a spare CD-R and CD-RW disc are provided for testing.



LG GCE-8400B

The Teac may be replete with features, but for solid, affordable 40-speed access, the LG GCE-8400B comes into its own. While it lacks Mount Rainier support, FineFocus and the 8MB data buffer, the LG nevertheless has a few ideas on how to ensure accurate CD burning.

Rejecting the traditional BurnProof technology, LG has created its own standard for minimising errors. There may be some programs that don't yet support LG's SuperLink, but the bundled version of Nero Burning ROM 5.5 does. A regular award winner due to its user-friendly interface and dependable results, Nero makes an excellent cut-price solution. It should be noted, however, that this is an LG-specific version, and so won't work with other CD-RW drives.

Perhaps predictably, the LG doesn't quite match the Teac's cutting-edge performance, although its times of two minutes 27 seconds and four minutes 59 seconds to burn CD-Rs and CD-RWs respectively are still significantly ahead of the 24-speed and 32-speed drives. Some blank media would have been appreciated, but in the light of the LG's £79 price tag it would be hard to expect more.

Verdict

With the two drives costing less than £100, both the Teac and the LG represent value for money considering the excellent speeds they deliver. However, with an eye to the future, it's the Teac that truly impresses with its fantastic features list and enhanced performance. We still expect the LG to sell well, though, and at £16 less it should prove a smart acquisition for the budget-conscious buyer.

Robin Morris

Teac CD-W540EK **TOP 10**

Specifications: 48x/40x/12x; 8MB data buffer; average access time 72ms; 146x192x42mm; two-year warranty.

Microwarehouse: 020 8906 9111
Website: www.teac.co.uk
Price: £95 ex VAT

Build quality	8
Features	9
Value for money	8

LG GCE-8400B **TOP 10**

Specifications: 40x/40x/12x; 2MB data buffer; average access time 100ms; 146x185x41.3mm; two-year warranty.

LG: 0870 607 5544
Website: www.lge.co.uk
Price: £79 ex VAT

Build quality	8
Features	8
Value for money	9

Power notebook

Samsung Q10TXC 866

Samsung's latest notebook, the Q10TXC 866, may not be up to challenging its competitors for speed, but it has plenty of other redeeming features to make up for this. Not least among these is its sleek, silver body, which weighs in at a lightweight 1.35kg. If you add on the supplied docking station you may lose some of its slim lines, but you do get a whole load of extra functionality.

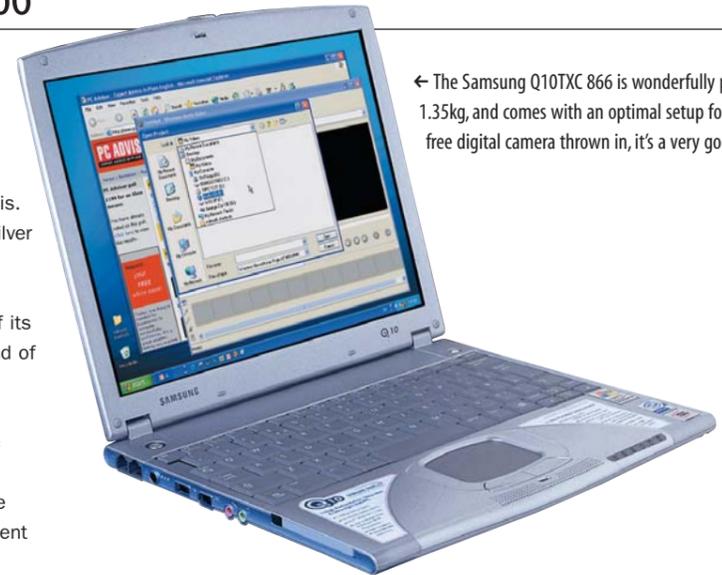
As a bonus this Samsung Power notebook will be bundled with a basic digital camera when it goes on sale although, because our review machine didn't come with this, we can't comment on its quality.

Ports-a-plenty

The Samsung Q10TXC 866 uses a battery-saving low-voltage Mobile Pentium III processor, running at 866MHz. This is twinned with 256MB of memory, an 8MB integrated Intel 830 graphics chip and a 30GB hard drive. Disappointingly, this specification only enabled the Samsung to turn in a WorldBench 4 rating of 87 – a score you'd think more worthy of a cheaper Budget notebook than one that costs a touch over £1,600. However, this is the usual trade-off you have to make since, as with the majority of notebooks around at the moment, power and portability continue to remain incompatible.

However, thanks to the supplied docking station, the Q10 doesn't have to make the other compromise that normally comes with increased portability – that is, a lack of ports and drives. In fact, even the base unit is well supplied with connection sockets, boasting two USB (universal serial bus) ports, as well as FireWire, modem and LAN (local area network), headphone and VGA ports and a single PC Card slot.

Factor in the extra 1.35kg Slice Dock docking station and you also get a combo DVD/CD-RW and floppy drives, plus a further FireWire port, two more USB ports, PS/2, SPDIF, parallel and serial ports.



← The Samsung Q10TXC 866 is wonderfully portable at just 1.35kg, and comes with an optimal setup for connectivity. With a free digital camera thrown in, it's a very good deal indeed

No wires

With all these ports, the Samsung is a well-equipped model. However, it has one more trick up its sleeve – built-in 802.11b wireless communication. While this may become a standard feature in the future, at the moment it's an innovative bonus which allows you to communicate with other similarly specified devices without the need for extra cables.

The 12.1in screen is capable of a maximum resolution of 1,024x768, but we found it washed out with a limited viewing angle. Although the display is fine when looking at it straight on, when you view from the side or above, the picture isn't that distinct. This is a common problem with TFT (thin-film transistor) displays, but the Q10 seemed to suffer a little more than most. Sound from the integrated chip is as poor as you would expect, although with a SPDIF connection you can output digital sound via speakers when you're not on the move.

Life support

The Samsung Q10 handles the power cable impressively, using a reel to wind the flex around for neater storage, a system reminiscent of Apple's iBook. But it's not only impressive in terms of mains power, it also claims to offer 8.5 hours of battery life; two hours from the standard battery and a further six hours from the bundled extra battery.

Add to this a one-year warranty, with free collect-and-return within around 72 hours, Norton AntiVirus, MGI VideoWave 4.0 and MGI PhotoSuite III SE software and the Samsung's high price starts to look more reasonable. Furthermore, you can choose between Windows 2000 or XP Pro. The model we tested came with XP Pro, so we haven't been able to measure its performance under 2000.

Verdict

The Q10TXC 866 is far from a budget model – if you are looking for top performance for the lowest price, it isn't for you. However, if a combination of portability, functionality and innovation is what you are after the Samsung could well be the solution. ■

Ursula Seymour

Samsung Q10TXC 866 **TOP 10**

Specifications: 866MHz low voltage Mobile Pentium III; 256MB RAM; 30GB hard drive; Intel 830M graphics chipset; 12.1in TFT; built-in wireless networking; 273x229x19mm; 1.35kg without docking station.

Samsung: 0800 521 652
Website: www.samsungelectronics.co.uk
Price: £1,616 ex VAT

Build quality	9
Features	9
Value for money	6

802.11 wireless networking

Sony wireless LAN access point and PC Card

If you have more than one PC, connecting your systems together to share resources – such as a printer – makes good sense. However, networks can involve a whole load of cabling, cost and hassle.

Wireless networking, on the other hand, is easier to set up. Based on the 802.11b standard, it has been around for some time, so in that respect Sony's latest offering isn't innovative and neither is the price.

With wireless PC Cards around the £60 mark and basic access points available for £150, Sony's asking prices of £109 and £297 respectively aren't cheap.

The company may be renowned for its style, but there's not much it can do with a PC Card. The antenna is more curved than some of its competition's, and it will match a Vaio notebook, but that's about it. The bundled Wireless Capsule software provides a simple method to share files



with other users, allowing you to send files to one or all of them.

The diminutive access point can either be attached to a wall or freestanding. It plugs into a high-speed ISDN, cable or ADSL modems providing internet access to wireless clients or it can connect directly into an existing wired network.

Verdict

If you want your networking kit to match your Vaio notebook then the Sony wireless access point and PC Card is for you, but there's more value for money elsewhere. ■

Will Head

Sony wireless LAN access point

Specifications: 802.11b wireless access point; ISDN, cable and ADSL support; LAN access; 156x35x125mm.

Sony: 08705 111 999
Website: www.vaio.sony-europe.com
Price: £297 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								8		
Value for money								3		

Sony wireless LAN PC Card

Specifications: 802.11b Wireless PC Card; Windows 98/Me/2000/XP support; Wireless Capsule software; 118x54x9mm.

Sony: 08705 111 999
Website: www.vaio.sony-europe.com
Price: £109 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								8		
Value for money								3		

Digital projector

Canon LV-7340

The glut of new projectors in our last issue highlighted the many innovative features that are taking presentations and home cinema to the next level. Set against this array of models boasting a short-throw lens, an ultra-portable frame or a pin-sharp image, the Canon LV-7340 feels distinctly antiquated. For while it isn't a poor



performer, with so much competition the LV-7340 will find it hard to make a mark.

Though it isn't amazingly portable, its sturdy 4kg frame will prove durable. The size allows Canon to build in plenty of ports and connectors, including a futureproofing DVI (digital visual interface). The adequate menu system produces few complaints, but at a time when 34dB (decibels) is becoming the preferred level of fan noise, the 37dB Canon is a bit loud.

It's hard to fault the specifications list, with native XGA (1,024x768) resolution support and the contrast ratio of 350:1 being perfectly adequate. Last month,

however, exploded the myth that a high brightness rating means a sparkling image. Several projectors generated fantastic picture quality using only 1,000-1,200 Ansi lumens.

You won't have any trouble viewing the 1,500 Ansi lumens output of the Canon but, in terms of depth of colour and definition, it struggles to match the likes of the Toshiba, NEC and Eizo. It has brightness to spare, and the ability to switch off the Turbo Bright option and preserve lamp life is a useful extra.

Verdict

The Canon LV-7340 wouldn't look out of place in any office or home, but in terms of price, performance and features it has difficulty distinguishing itself from the host of exciting projectors around it. ■

Robin Morris

Canon LV-7340

Specifications: 1,500/1,300 Ansi lumens; max uncompressed res 1,024x768@16.7m colours; max display size 300in@12m; S-Video; 37dB; 200W lamp (life of 1,000 hours, replacement cost £385; 332x232x90mm; 4kg.

Canon: 0800 616 417
Website: www.canon.co.uk
Price: £2,799 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality								8		
Features								7		
Value for money								7		

Multifunction device

Kyocera Mita KM-C830

Most printer manufacturers are adding multifunction facilities to their range, with options to copy and scan documents as well as email and fax. Not to be outdone, Kyocera Mita has introduced the KM-C830. At heart it's an A3 colour photocopier with a processing engine that achieves 30ppm

(pages per minute) for an A4 mono document and up to 8ppm for full colour.

Kyocera Mita has redesigned its copier technology to reduce the cost of replacement parts. It claims that this will save as much as 60 percent in running costs compared to its major competitors. Comparing the costs of toner and replacement parts to the work done over a typical duty cycle gives a page price of just under 3.5p, compared to just 5p for the average colour laser printer in our recent network printer round-up.

Most of the features that turn the KM-C830 into a true multifunction unit don't come as standard. For network printing or scanning you'll need to install the relative optional network packs at £1,699 and £699 respectively. For duplex printing a 'D' model is available at just under £8,000 or as an upgrade for £791. A selection of paper feeders can also be



fitted including a 3,250 sheet-finishing unit. Memory expansion, CompactFlash cards, optional hard drive expansion and a dedicated barcode reader are also available, enabling the KM-C830 to be tailored to suit most printer/copier requirements.

Verdict

The KM-C830 is one of the most cost-effective solutions for high-volume colour copying and printing. However, optional extras are expensive and, if you use it for network printing and scanning, then you'll soon add a couple of thousand to the base price. ■

Paul Warner

Kyocera Mita KM-C830

Specifications: 30/15ppm A4/A3 colour; 8/4ppm A4/A3 mono; copy time 22/11 secs colour/mono; 600dpi res; 256 greyscale (scan/copy); duty cycle 100,000/25,000 mono/colour pages in a month; cost per page: 3.3p/0.59p colour/mono for colour.

Kyocera Mita: 0118 931 1500
Website: www.kyoceramita.co.uk
Price: from £6,999 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality									9	
Features									8	
Value for money									5	

Multifunction device

Brother MFC-9160

Brother's MFC-9160 is a mono laser-based MFD (multifunction device), which allows you to print, scan and copy from a single unit. It looks like a desktop photocopier but with a smaller footprint, and can be connected via parallel or USB (universal serial bus) ports, though only a parallel cable is supplied.

The control panel is uncluttered, but the emphasis on some functions is odd. Its menu system, which you'll probably use infrequently after setup, takes prominence, whereas copy, print and scan buttons are tricky to find.

The MFC-9160 has some useful features, such as the ability to print multiple pages and a poster print facility. More control is provided from the software driver that runs with all versions of Windows apart from XP, but you can download a patch for this.

The laser engine is rated at 600dpi (dots per inch) and 10ppm (pages per minute). Under test, it managed a five-page document in just over a quarter of a minute, with the same document taking half a minute longer to copy, because of the scanner's warm-up time.

Print quality is good, with crisp, black text, and greyscales are also well



reproduced. Print costs are derived from a 2,200-page toner cartridge at £18 and an 8,000-page drum at £100. This gives a page cost of 2p.

Verdict

Brother's MFC-9160 is a neat, compact device ideal for those with little space on their desktops. Some of the controls could be better positioned, but under the software driver the device is versatile. ■

Simon Williams

Brother MFC-9160

Specifications: 600dpi res; 6.5ppm; 8MB print buffer; 2,200-page toner cartridge; 8,000-page drum; supports PCL5e page description; max paper weight 159gsm; 200-sheet input tray; 30-sheet autoseeder; scanner optical res 600x2,400dpi; 24bit colour.

Brother: 0845 606 0626
Website: www.brother.co.uk
Price: £379 ex VAT

0	1	2	3	4	5	6	7	8	9	10
Build quality									9	
Features									8	
Value for money									8	