WIRELESS We measure the strength and reliability of the wireless connection in the same room as the router, one room away and two rooms away

KEYBOARD We rate the comfort of the keyboard, looking out for spongy keys and overly bendy keyboard surfaces **SCREEN** We assess different aspects including brightness and contrast, how well colour is represented and the viewing angle

TOUCHPAD We assess the size and feel of the touchpad and its buttons **USB PORTS** We note how many different connections the laptop has, including USB ports

Latest laptops

Find a top-performing laptop for all purposes – we pick Best Buys to suit every budget

s their price keeps falling, laptops are becoming ever more popular, with sales increasing tenfold since 2001. A laptop's key benefit is portability; built-in wireless connectivity and an increasing number of wireless hotspots (see 'Wireless networking', right) mean you can now easily surf the internet and stay in touch while on the move.

Modern laptops will happily perform most tasks, though the same money

ONLINE Laptop Best Buy listings, including the latest from Sony, are updated monthly at www.which.co.uk/ laptops spent on a desktop PC or Mac will still buy more in terms of specification and power. This will usually only matter if, for instance, you're editing videos or playing the latest games.

All laptops come with a built-in LCD screen and many models come with high-definition screens. Standard-sized laptops will have a 15-inch display; a desktop replacement might come with a 17-inch display. Ultra-portables might go as low as 12 inches, while netbooks can be a squint-inducing 7 inches.

Expect battery life to be hours rather than days. Tasks such as watching a DVD or using the wireless connection are particularly power-hungry.

In the fast-moving world of IT, we test laptops as close to our publication date as possible and occasionally use reviews samples in our testing. If you find that some details have changed, you'll generally be getting higher specifications for the same price.

Which? reliability survey

Which? members rate the major manufacturers

As laptops are made up of a single unit, they're not as easy to fix as a desktop computer if things go wrong. A failure with the screen, for example, will render your laptop unusable, whereas a similar problem with a desktop will most likely just require the monitor to be replaced.

However, our annual reliability survey of 7,919 members found that laptops are more reliable than desktop computers. Overall, laptops receive a reliability score of 87% compared with 80% for desktops.

Sony and Toshiba are the only two brands to be rated as above-average for reliability, and no laptop brands received a below-average score.

MANUFACTURER	RELIABILITY SCORE %
Sony (178)	93
Toshiba (353)	93
Fujitsu-Siemens (68)	91
Apple (114)	87
Dell (474)	87
Acer (216)	84
Hewlett-Packard (166)	84

TABLE NOTES Sample size inbrackets. Score is based on thenumber of laptops that neededrepair. 7,919 Which? Online panelmembers surveyed in May 2008.

How we test

We set up each laptop as a typical consumer would and assess how easy it is to get it going. Our experts rate the sensitivity and comfort of the keyboard and trackpad and how easy it is to open the lid. We rate sound and screen quality, and time tasks such as burning a DVD, transferring files or installing software. We also time how long the battery takes to charge, and how long it lasts playing a DVD and using the wireless connection.

Choosing a laptop

It's worth spending slightly more to get a higher specification than you currently need. The main area to focus on is Ram – the bit of your computer that's used to perform tasks.

If you want a laptop you can take out and about with you, consider the weight of your chosen model. Those with larger screens tend to be heavier, so you may need to trade off screen size against portability.

Those planning to use their laptop to carry out graphics-hungry tasks, such as video editing, should look for one with dedicated graphics memory.

We've listed three different categories of laptop and the things you need to consider in each category.

Find the right model for you with our top tips for choosing a laptop

If you're on a tight budget, spend as much as you can afford on increasing the laptop's memory (Ram).

A decent processor (the computer's brain) is a good idea, but you don't need the best chip on the market.

For playing games or editing video, it's best to go for a laptop with a separate graphics card. These have their own memory, so they don't take up your laptop's valuable Ram.

 Try the keyboard before you buy, to ensure you're comfortable using it.
 Expect the battery to last hours not days. Tasks such as watching a DVD or using the wireless (Wi-Fi) connection will drain it more quickly.

Think about the laptop's weight. If you're going to be using it on the move, mini laptops are a good choice.







Mini laptops/netbooks

Mini laptops, also called netbooks, are a different class of computer from standard laptops. They're small and compact, making them the ideal portable laptops:

Despite their lower specifications, they're adequate for general tasks such as word processing and internet surfing.
Mini laptops have a small screen and keyboard, so you may not find them as comfortable to use as a full-sized laptop.
The operating system may be different from the one you're used to – several use the free Linux operating system.
Don't expect built-in CD and DVD drives in these machines. You'll get wireless connectivity and a webcam, though. For Best Buy mini laptops, see p48.

Family/all-rounders

They may not have the highest specifications when it comes to graphics cards or memory, but these laptops are great for carrying out day-to-day tasks:

- Good for word processing and surfing the internet.
- All-round machines are a great addition to the household on top of a desktop computer.

Built-in wireless technology means you can connect them to your wireless network and get online around the home.

With their easy portability, they let you keep an eye on your kids while they're doing their homework at the kitchen table, for example.

Turn to p49 for Best Buy family laptops.

Multi-media/professional

High-end performance for the serious user that comes at an additional price:

Multi-media laptops are geared more towards watching video or carrying our graphically demanding tasks such as video editing.

We've tried to select models that aren't prohibitively expensive – you really can go to town when upgrading a laptop and end up spending a fortune. Our selected MacBook Pro, however, really is a top-end model.
 Most of our multi-media laptops will play Blu-ray discs – the latest in high-definition video.

Check out our Best Buy professional laptops on p50.

WIRELESS NETWORKING

For your wireless home network, you'll need a router and possibly some adaptors to enable your computers and other kit to send and receive information. Most laptops now come with built-in Wi-Fi, which allows them to connect to wireless networks. If yours doesn't, the easiest way to give it wireless access is using a USB adaptor (less than £50). Just plug it into a spare USB port – there's no internal installation required.

Essential for any network is a router. It sits at the centre of your network, connecting all the computers together, and providing access to the internet. Wireless routers with a built-in modem are known as 'gateways'.



Contacts

Acer 0870 853 1005 www.acer.co.uk Apple 0800 048 0408 www.apple.com/uk Asus 0870 1208340 www.asus.com Dell 0844 444 5818 www.dell.co.uk Fujitsu Siemens 08702 434397 www.fujitsu-siemens.co.uk HP 0845 270 4222 www.hp.com Lenovo 0870 608 4465 www.lenovo.com/uk Samsung 0845 726 7864 www.samsung.com/uk Toshiba 0844 847 8944 www.toshiba.co.uk

Mini-laptops/netbooks These laptops are tested differently to the full-sized models, so results are not comparable

74% Asus Eee PC S101 Price £440

This strikingly slim and lightweight machine weighs around 1kg, and is only a couple of centimetres thick. At about £440 it's a bigger investment than a standard Eee PC.

Despite its diminutive size, the S101 feels strong and solidly constructed. A nice addition is the bigger keyboard. Anyone who struggled with the small keys on the original Eee will find this a distinct improvement.

The keyboard on this model has a nice, firm action and fills the width of the case, offering a much more comfortable typing experience. We like the accurate touchpad, which is a reasonable size and has a bar along the bottom that acts like the buttons on a mouse.

Opening the lid is a very fluid, easy motion. Underneath, the 10.2-inch screen has a pleasant matte finish that reduces background reflections. The screen is sharp and vivid. It includes a built-in 0.3 megapixel webcam for chatting to friends and family online.

The S101 is quick to start up – taking 31 seconds in our test – and we found that it coped with copying files across its wireless connection with ease.

Don't expect to find a CD or DVD

KEYBOARD Stretching across the length of the laptop, the keyboard is a good size in this class. The keys have a nice, firm action

drive in the S101 – as with other mini laptops, there isn't one. These ultra-portable devices are more about having the freedom to surf the internet when you're out and about without having to lug a weighty laptop around with you.

The S101 offers 1GB of Ram, meaning it's certainly not a slouch, and 16GB of storage is sufficient for plenty of music tracks should you want to listen to music on the move.

The S101 offers the latest draft-n wireless technology, meaning that

you'll be able to hook up to your wireless network at home or go online at a wireless hotspot when you're out and about.

Zee PC S101

Sec. In

Battery life isn't bad at all. Using the device's wireless connection, we found that it lasted nearly four hours, which should be more than enough for most people's daily commute.

The mini laptops we tested on this page were review samples. Go online to read the latest results for store-bought laptops at www.which. co.uk/laptops. TOUCHPAD

SCREEN The S101 has a 10.2-inch

screen – larger than other mini laptops in this class. It has a matte

finish which reduces reflections

The accurate touchpad has a button bar for performing the equivalent of a mouse click

WORTH KNOWING

It comes with 30GB of free online storage.

Screen size (inches) 10.2 Ram (GB) 1.0 Storage capacity GB 16 Processor Intel Atom 1.6GHz Operating system Windows XP Home Dimensions (mm) 265x21x180 Weight (kg) 1.1

Everyday tasks ***** Screen quality ***** Battery life ***** Ease of use **** Available Online

ALTERNATIVE MODELS For full reviews of these go to www.which.co.uk/laptops

71% Acer Aspire One £175

which? BEST BUY

A good all-rounder. Despite a modest 512MB of Ram, it runs quickly and smoothly. Battery life is good – around three hours when using the wireless connection.

The keyboard is comfortable to use, the screen bright and clear. A new version of the Aspire One was announced as we went to press. Available PC World, Amazon



68% Dell Inspiron Mini 9 £269

Dell's Mini 9 is sleek and low-key looking. Opening the glossy black casing reveals an impressive, silver-mounted 8.9-inch screen. The keyboard is good for such a small device, working better than many of its

rivals. Performance is good and, if you don't expect miracles (like being able to edit video), you won't be disappointed. Available Dell



61% Asus Eee PC 901 £285

A compact and robust mini laptop, the Eee PC 901 is a flexible, useful machine.

The keyboard feels rather cramped for adult fingers, while the small pointing device requires careful use

for accuracy. Battery life is good, lasting for well over four hours in our test when we used it wirelessly. Available Online



All-rounders/family laptops

70% Dell Studio 15 £649

This stylish laptop from reliable brand Dell's Studio range is a really good all-rounder that should suit the needs of a family well.

The model we tested boasted good wireless performance and average performance at everyday tasks such as installing programs, copying data and burning DVDs.

Like its big brother, the Studio 17, this is a modern-looking machine available in a range of colours and designs. Be prepared to pay extra for anything other than the standard matte black, though.

The Studio 15 features a powered DVD slot-loader that feels more satisfying and less vulnerable than a conventional DVD drawer.

The Studio 15 appears solidly constructed with no creaks, so it should be able to withstand being lugged around the home by the kids without too much trouble. Opening the lid is an easy, smooth motion.

It has a very good 15.4-inch screen with built-in webcam, but the screen is glossy, which means that you should expect the usual reflections in bright light or outdoors.

The keyboard feels rather springy and is quite bendy around the centre.



DVD DRIVE Unlike most laptops, the Studio has a slot-loading DVD drive rather than the usual disc tray

The touchpad is on the small side, but the buttons have a reasonable action.

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If you're planning to upgrade the memory, you may struggle; there are lots of screws that need removing before you reach the memory slot. Changing the battery easier, though, as there's just one latch to remove.

Alternatively, opt for the most memory you can afford when you make your purchase – Dell's website lets you alter the specifications of your chosen laptop (at a price, of course). The speed at which the Studio 15 carried out the real-world tasks we set it was average. It was quick to boot up though, so if you're in a particular hurry to get online, you won't be kept waiting around for it to whirr into action.

Battery and wireless performance were above average in our test. DVD playback lasted about two-and-a-half hours, which should be sufficient for most films. The battery lasted nearly four hours when we used the laptop wirelessly. As with many laptops on test, sound quality from the speakers is poor. Lower spec models start at £429.

WE LIKE The choice of colours available.

Screen size (inches) 15.4 Ram (GB) 3 Storage capacity GB 320 Processor Intel Core 2 Duo 2.26GHz Operating system Windows Vista Home Premium Dimensions (mm) 355x30x260 Weight (kg) 2.77

Everyday tasks *** Screen quality ***** Battery life **** Ease of use **** Available Dell

ALTERNATIVE MODELS For full reviews of these go to www.which.co.uk/laptops

70% Dell Studio 17 £629

which? BEST BUY

The Studio 17 comes with a decent 17-inch glossy screen, complete with built-in webcam. The keyboard is firm and comfortable to use and, while the touchpad is a little small, it's quite easy to control.

Solidly constructed and with no creaks, the Studio 17 also has a slot-load DVD rather than the drawer that many models have. Available Dell



77% Apple 13-inch MacBook £1,125

This laptop is well constructed and solid. We like the slot-loading disc drive – it's much better than the usual flimsy drawer. The lid opens smoothly to reveal a clear 13-inch screen with a built-in webcam. The keyboard

is comfortable to use and the large trackpad uses a combination of finger touches to perform tasks. Available Apple



which

71% HP Pavilion dv**3505ea** £650



This robust-looking laptop is a solid performer. The 13.3-inch screen is particularly impressive – it's well lit and displays clear, vivid images. The keyboard is a nice size but has a shiny, slightly slimy

feel, which is an acquired taste. It's one of the better laptops we've tested at displaying graphics. Battery life could have been longer. Available Limited availability online



www.whichcompare.co.uk

Multimedia/professional

70% Acer Aspire 8920G £750

With a large screen and keyboard, good sound quality and Blu-ray playback, Acer is certainly offering a lot of machine for the money with its Aspire 8920G.

As laptops go, this one's big. It needs to be to cater for the 18.4-inch screen under its stiff, heavy lid. All this size makes it particularly heavy – the Aspire weighs 4.2kg, more than two-and-a-half times the weight of the lightest full-sized laptop in our test. So this isn't the laptop to choose if you're looking for something to carry with you on a train journey.

The 8920G was one of the fastest on test at carrying out the everyday tasks we set it. With the latest draft-n Wi-Fi connectivity, the Aspire's wireless data transfer was slick, though as with all the laptops on test, the speed of transfer dropped off significantly when we moved two rooms away from our test wireless router.

The huge screen is let down slightly by uneven backlighting. It's a glossy screen so, as with others of this type, you can expect screen reflections.

We found that the keyboard flexes and bends as you type – but we liked the extra numeric keypad that you don't



find on smaller laptops. Despite its size, the Aspire's touch pad is small. It works well though, and is easy to use. We liked the large, futuristic, multi-media controls beside the keyboard, too.

We were really impressed with the Aspire's built-in speakers. Typically, laptop speakers deliver poor sound, but these are rather good. We found that speech playback is clean and clear and the treble and bass notes sound good. The Aspire boasts another rarity in laptops in this price bracket – a Blu-ray player that can be used to watch high-definition movies on Blu-ray discs.

Battery life isn't great – about an hour and three-quarters when playing a DVD – so you may not catch the end of the film you're watching away from home. We got around two-and-a-half hours out of it when we tested it using the wireless connection.

The 8920G we tested has been on sale for several months now, so we can't guarantee that this particular model will be around for much longer. It's certainly worth tracking down if you can, though.

WORTH KNOWING This laptop plays

Blu-Ray discs.

Screen size (inches) 18.4 Ram (GB) 3.0 Storage capacity GB 250 Processor Intel Core 2 Duo 2.0GHz Operating system Windows Vista Home Premium Dimensions (mm) 440x55x300

Weight (kg) 4.2 Everyday tasks **** Screen quality **** Battery life ** Ease of use **** Available Online, but catch it soon

ALTERNATIVE MODELS For full reviews of these go to www.which.co.uk/laptops

79% MacBook Pro £2,025

This top-end laptop looks and feels well made and solid. The lid opens smoothly to reveal a clear, well-lit 15.4-inch screen that displays some of the best graphics of the laptops we've tested. Its backlit keyboard is

comfortable and the machine very fast. Wireless connectivity was impressive.



66% Asus N50VC-FP021C £700

The Asus N50VC-FP021C is a big, glossy laptop with a good-quality 15.4-inch screen, a big keyboard and we liked the ability to play Blu-ray discs.

The keyboard is quite well labelled. The

trackpad works well, but we found the buttons rather noisy when you click. Wireless connectivity is good. Available Online



64% Acer Aspire 6930G £558

The big, solid Aspire has a slightly springy keyboard, but it's a nice size and there's room for an additional numeric keyboard.

The large 16-inch screen displays good-quality images, and the speakers are

slightly better than most of the laptops on test. Battery life is disappointing, however. Available Online

