

1
ASUS RT-N15
 WWW.COMPUTERWHOLESALE.COM.AU
 \$124
 ★★★★★

2
BUFFALO NFINITI WIRELESS-N HIGH POWER ROUTER & ACCESS POINT
 WWW.HT.COM.AU
 \$159
 ★★★

3
EDIMAX NLITE 150MBPS BROADBAND ROUTER BR-6324
 WWW.MEGABUY.COM.AU
 \$73
 ★★★★★

4
EDIMAX NMAX AR-7265WNA
 WWW.MEGABUY.COM.AU
 \$124
 ★★★★★

5
SMC ADSL2 BARRICADE N
 WWW.ITSDIRECT.COM.AU
 \$176
 ★★



Wireless N Routers

802.11N IS THE BIG THING IN WIRELESS NETWORKING, BUT FINDING THE DEVICE FOR YOU IS STILL A MINEFIELD

As the draft 802.11n standard becomes more mature, wireless routers that support it have sprung up all over the place. But not all 802.11n routers are created equal. Some will fit into your existing b, g or cabled setup, while others are all-in-one devices including a modem, designed to replace all your existing networking kit. Performance isn't consistent either - while all the devices we look at support the draft-n standard, real world speeds differed significantly between 300Mbps/sec models from different brands. Edimax have also recently launched their nLite products capped at 150Mbps/sec. The slower speed makes them a lot cheaper - but like the others there are tradeoffs, be they in performance, ease of use or features. Setting up your home network is now a lot easier than it used to be. Disc and web-based setup wizards take the pain out of initial setup and all the models we looked at sported WPS (Wireless protected setup) for easy wireless setup.

We tested wireless performance with a Centrino-2 based laptop in a home-like environment at close, mid and long range, taking speed results for the latter with twelve metres and three double brick walls between

router and laptop. A 128MB file and 128 files, each 1MB in size, were transferred over the link and the transfer speed was measured, all while competing with a nearby wireless network designed to provide interference. The only deviation from default settings was to enable WPA2 security if it wasn't already enabled.

The **Asus RT-N15** is a plain looking router touting that it uses 19% less power than other routers. It does that by cleverly managing power on wired connections. The point is somewhat moot, as you'll still need your old modem to connect to the internet. Including a 315-page manual also goes to show just how serious they are about the environment.

Nitpicking aside, the RT-N15 is loaded with features and a pleasure to use. It was one of just two routers sporting Gigabit Ethernet ports and the web interface was the best on show - everything was laid out easily, nicely and was accessible. Common configuration problems were easily solved through on-screen prompting by a character called Dr Surf.

Setting up the router was actually quite easy and intuitive. The initial wizard is simple enough to guide even the most novice user through basic setup.

The good stuff doesn't stop there either. In both our short and long range tests the RT-N15 transferred our data the fastest of the bunch at just below 10Mbps/sec over short distances and 5Mbps/sec when further away. Considering the price, the RT-N15 stands out well above the others - but if you need modem capability as well, it's not for you.

The second router in our roundup this month is Buffalo's succinctly-named **Nfiniti Wireless-N High Power Router & Access Point**. The long name takes the challenge out of identifying its key features. Its main claim to fame is extra-sensitive antennae, and the ability to change between a fully fledged router or just an access point to extend your network at the flip of a switch.

In addition to the usual features in a router, the Nfiniti also sports a Gigabit Ethernet and a USB port, turning the router into a NAS if an external drive is plugged in. With a drive attached, the router also functions as a simplistic BitTorrent client so you don't need to leave your computer on overnight.

The Nfiniti was the only router in the roundup to have some form of wireless security enabled out of the box. While other routers allowed you to set one during the CD setup process,

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the Nfiniti arrived pre-configured with WPA security and the key printed on the side. This is handy, given that many users will skip the CD setup and potentially leave their network open to neighbours 'borrowing' their Internet.

In terms of wireless performance, however, the Buffalo came tragically unstuck. In what seems to be a firmware-related issue, we had trouble connecting at anything above 11Mbps/sec. After resetting the device we did manage to connect at higher speeds; however transfer speeds were woeful, with all of our tests clocking between 1 and 1.75Mbps/sec, which at best took us 75secs to transfer 128MB. The Nfiniti is otherwise well-rounded, and we suspect the speed issues will be fixed in future firmware revisions, although none is available at time of writing.

That aside, the web interface was easy to use, if a bit cluttered. We wouldn't write this one off, but if you're thinking of buying then have a look at the Buffalo website first, to see if the issues have been corrected. Just remember you need a modem with this one too.

The **Edimax nLite 150Mbps Broadband Router BR-6324** is the last, and the only one not trying to sell the full theoretical 300Mbps/sec as

set out in the draft-n standard. Pitched at the budget end of the market, the nLite is designed to do everything a router needs to do without any extra features - very much the opposite of the Buffalo - without the extra cost.

The interface is clean and welcoming to new users, but this has the tradeoff that more advanced features are buried beneath a lot of clicks. Being a budget router there isn't a lot to talk about, but one feature we did find nice was the 'Ezview' - a map of all the devices on the network with links to their configuration pages if they have one.

Wireless throughput wasn't the fastest on test, as to be expected, but finding it placed in the middle of our table did surprise us. Average speeds between 2.5Mbps/sec and 3Mbps/sec didn't compare to the Asus or Edimax nMax, but it did sit well above the other two devices in the roundup, which is impressive given that it's speed-limited where the others aren't. Overall this is a great entry-level or replacement router, but its price advantage will be negated if you need a modem as well.

If you are setting up an ADSL connection from scratch you won't be just looking for a new router to handle your network, you'll also need a modem to plug into the phone line. Whereas the previous devices we looked at needed a modem as well, the **Edimax nMax AR-7265WnA Modem/Router** sports an internal modem so you won't need an extra box chewing up power in your study.

Other than that, the nMax's features are fairly standard. The menus are simple to view and manipulate,

although the sheer number of options presented on a page could overwhelm a novice user.

Our roadtesting, however, was anything but bland. The test data sets moved through the air in a very snappy 23secs at close range, or 37secs further away - for speeds between 3.5Mbps/sec and 5.5Mbps/sec. These may represent the upper limit of the 10/100 Ethernet ports on the device; Gigabit Ethernet might see still faster speeds. That aside, its ease of use, raw speed and reasonable price mean that this is our favourite of the devices on test, and would be suitable for anyone thinking of replacing their aging gear.

The last product in our roundup this issue is the **SMC ADSL2 Barricade N**. The Barricade isn't much to look at, and you could be forgiven for thinking it somehow snuck onto the page from some time in 2004. Feature-wise it checks most of the boxes, although Gigabit Ethernet or a USB port would have been nice. The web interface is a variation of that installed on recent Belkin modem/routers, which is highly customisable and versatile, if slightly cumbersome to use.

Performance however is where the Barricade starts to come apart at the seams. Clocking under 1.2Mbps/sec at best in close range and 0.32Mbps/sec at worst, transferring something simple like a hundred photos could take in excess of 6mins. We did try to find an updated firmware, to no avail - it seems the Barricade is determined to be incredibly slow with wireless security enabled. To add salt to the wound, at \$176 it's the most expensive of it. In a few words, it's fair to say stay away from it.

Alex Bradner