

Belkin Wireless Pre-N

PRICE £77 (£90 inc VAT)

SUPPLIER www.wehavethings.com

VERDICT The highest speed over long range, the Belkin doesn't require extra outlay on signal boosters. It represents good value if you need the range.

Four of the wireless routers this month come with MIMO (Multiple-Input Multiple-Output) technology, a system that transmits the same stream of data twice over one channel to increase signal strength and coverage. And the potential of MIMO is proved by the long-distance results of the Belkin Pre-N router.

Our long-range test saw a data rate – with WPA encryption – of 9.4Mb/sec. This is faster than many other routers' short-range speed without encryption. Our 100MB selection of files transferred in under a minute-and-a-half, making the Belkin a great choice for larger offices or homes with multiple users, where long-range performance is critical. Close-range throughput of 11Mb/sec doesn't come close to upsetting the KCorp's 17.8 Mb/sec, though.

As with most of the proprietary transfer-speed technology (MIMO will remain proprietary until 802.11n is ratified by the IEEE), Belkin claims that the Pre-N router

works fastest with its own PC and PCI cards, so you won't be able to integrate it into an existing wireless network at full speed.

This isn't a particularly elegant router – the three aerials make it difficult to house unobtrusively. Apart from the MIMO speed and range boost, the Belkin offers all the usual features. The built-in firewall offers SPI (Stateful Packet Inspection) to protect you from DoS (Denial-of-Service) and Ping of Death attacks, but, unlike the Linksys Wireless-G SRX, there are no user-configurable filters, such as URL or keyword blocking. However, Belkin does include six months' free parental-control filters, based on the Cerberian blacklist system.

WEP and WPA encryption are supported, although unlike the KCorp KLG-575 it doesn't offer RADIUS encryption. You can filter permitted users by MAC address and, like all of the routers this month, you can allow unfettered access to a single PC using a DMZ (demilitarised zone). Belkin also complies to



the 802.11e QoS (Quality of Service) specification, meaning the quality of your VoIP calls is less likely to drop out if others start using the WLAN.

The Belkin is also user friendly. A step-by-step guide is included on the CD, which will set up the router as you're walked through the settings on offer. Updating the firmware is simple, as a button in the interface checks the Belkin website for new versions.

There's no denying that the Belkin Pre-N router is an expensive option, and the accompanying Pre-N PCI and PC Cards and PCI adaptors aren't cheap either, at £58 and £63 respectively, but there's also no arguing with the speed or range of the device. If you need your wireless network to cover a large area, the Belkin is the one to go for.

PC PRO RATINGS	
PERFORMANCE	★★★★★
FEATURES & DESIGN	★★★★★
VALUE FOR MONEY	★★★★★
OVERALL	★★★★★



KCorp Lifestyle KLG-575

PRICE £37 (£44 inc VAT)

SUPPLIER www.savastore.com (code: 10280686)

VERDICT Incredible speed, a decent array of features and a phenomenally low price mean the KCorp is the best router overall this month. Just note the lack of an ADSL modem.

While we normally view proprietary speed-boosting technology with suspicion, there's no alternative for those wanting to use wireless devices that rival the speed of a wired network. KCorp's KLG-575 is proof that 'interim' technology isn't always half-baked, as it blitzed through our speed tests. The device uses Atheros' Super G technology, which promises to increase range, as well as boosting bandwidth to a heady 108Mb/sec.

In our short-range test, the Atheros 5005 chipset lived up to its claims and delivered an impressive 17.8Mb/sec with WPA encryption, making it the fastest short-distance router in the Labs. Once we moved down a floor and across the building, the KCorp continued to beat everything else on test, delivering 100MB of files in 60 seconds, a throughput of 14Mb/sec.

The KCorp doesn't incorporate MIMO, which means long-distance signals often take a circuitous route. Moving out into the garden saw transfer times increase to three minutes, six seconds for 100MB of files, or 4.5Mb/sec. MIMO

technology is expensive, though, as the Belkin, Buffalo and Linksys routers show, and there's no reason not to use the KCorp for sharing an Internet connection over a long distance.

Although it doesn't include bonus features like the USB ports of Asus' WL-500g Deluxe, the KCorp offers a decent array. Along with the standard MAC and IP filtering comes URL, protocol and even domain blocking, all of which will help prevent undesirable content reaching users. There's also support for a RADIUS server, so you can connect the KCorp securely to an office network. Plus, you can disable the wireless features of the router altogether, which saves having to unplug it to lock down your network.

All the important feature boxes are ticked. The external antenna is removable, allowing you to stow the router in a draw and run an external aerial on top of a desk. Four 10/100 Ethernet ports will allow you to connect four PCs, while a WAN port will connect you to your Ethernet modem or existing LAN (there's no ADSL modem in this router).



Setting up the KCorp is a piece of cake, thanks to the intuitive web interface. Advanced settings are easy to access and alter, and there's a useful wizard for those who'd rather not delve into the more advanced features. You can change the router's MAC address too.

At £37, the KCorp KLG-575 offers superb value for money – especially as the PC Card and PCI adaptor, which you'll need to benefit from the boosted speed, are so cheap (see p109). If you just want a fast, secure network that's easy to manage, and you don't need an integrated modem, this is the router to buy.

PC PRO RATINGS	
PERFORMANCE	★★★★★
FEATURES & DESIGN	★★★★★
VALUE FOR MONEY	★★★★★
OVERALL	★★★★★