

Photo 1 of 2



Shown in New York, Tuesday, Oct. 9, 2007, the \$200 Belkin Wireless USB hub is one of the first gadgets to use a new wireless technology, known as ultra-wideband, that promises fast data transfers at short range. (AP Photo/Kathy Willens)



## Review: Wireless USB Hubs Show Promise

By PETER SVENSSON – 20 hours ago

NEW YORK (AP) — The back of a computer tends to be a messy, messy place, with cables snaking like an overturned bowl of spaghetti.

Now, the first fruits of an industry push to cut that tangle have hit the market, and while they won't be much of an immediate help, the underlying wireless technology does show some promise.

Yes, you heard right. Another wireless technology. Apparently, Wi-Fi and Bluetooth are not enough. This one is called ultra-wideband, or UWB. It's similar to Bluetooth in that it has a short range, up to about 30 feet, but it's potentially much faster — as fast, proponents say, as the USB cables we use to connect printers, webcams and external hard drives.

You can't, however, expect to shear away a lot of cable clutter with the first general-purpose products that use UWB. These are USB (Universal Serial Bus) hubs, each of which has four ports for regular USB cables. The only "wireless" part is the connection between the wallet-sized hub and the computer, which is equipped with a UWB dongle that sticks into a USB port.

The intended use is something like this: You plug your peripherals, like the printer and your backup hard drive, into the USB hub in your office. When you use your laptop there, you insert the dongle, which connects you to the peripherals without being tethered by a USB cable.

There are probably people who would find some use in this. I'm not one of them, or at any rate, I wouldn't pay \$200 to eliminate a single cable between the computer and the hub. Regular wired USB hubs cost less than \$20.

The real potential here is to have UWB chips and antennas built straight into peripherals and computers. Good bye to cables, dongles and hubs! That's the long-term plan of the PC industry group that certifies USB products, and it's created a Certified Wireless USB standard to help shepherd that along.

It was to get a first look at the viability of that vision that I tested two wireless USB hubs from Belkin International Inc. and one from Logitech Inc. Each one costs \$200 with an included dongle.

The verdict: UWB has a long way to go to fulfill its promise of speeds comparable to USB cables. But the Belkin Wireless USB Hub was at least faster than Wi-Fi, provided a stable connection, and was easy to set up and use. It did require me to install some software on my PC. Sorry, it's for Windows XP and Vista only. Gefen Inc. is taking pre-orders for a \$400 wireless USB hub that it says will work with Macintosh and Linux computers, but I wasn't able to test it.

I connected a fast hard drive to the Belkin hub, and was able to transfer a 430 megabyte folder of music files to my dongle-equipped computer, 3 feet away, in 94 seconds. It was only a little slower at 30 feet, but at that range, the hub and dongle really needed to be in sight of each other, otherwise the connection was lost. At closer ranges, a line of sight was not necessary, and the signal was able to penetrate a desk.

How does this compare to the alternatives? Using a USB cable, the same folder transferred in 23 seconds, four times faster, so UWB still can't match a fixed connection. But it beat Wi-Fi of the latest, fastest flavor ("draft-N"), which took 160 seconds.

It was also nice to be able to plug USB peripherals into the hub and have them be recognized instantly, as if they were plugged right into the computer. Wi-Fi just isn't designed for that.

The Belkin hub, which just became available, is actually the second generation of UWB hubs from the company. For reference, I tested the earlier one, called the Cable-Free USB Hub. It came out late last year. It doesn't follow the Certified Wireless USB standard, so you can't expect the dongle to work with future gadgets with built-in UWB. It was also very slow, taking more than 4 minutes to transfer that 430 Mb file folder. The connection also broke off a few times, so give this one a pass.

The real disaster of the test was the Logitech Wireless USB Hub and Adapter. After a relatively lengthy installation process, the complicated software proved unreliable. When I moved the computer out of range from the hub, I lost the connection, and wasn't able to re-establish it at all. Logitech says it's bringing out new drivers that should help the situation.

Before the dongle dropped the signal, I found the transfer speeds to be comparable to Wi-Fi. That's pretty galling, considering Logitech's packaging proclaims the hub to transfer at "up to 480 Mbps," or as fast as a USB 2.0 cable. That's a long-term goal of the industry, and obviously not something current products are capable of. Belkin's older hub carries the same claim, but it was sensibly left off the latest one.

Before we can cheer at the advent of UWB, there are more questions that need to be answered. For instance, are Certified Wireless USB gadgets from different manufacturers really going to be able to talk to each other? Is the power consumption really low enough for

battery-powered gadgets? Will the transfer speeds get better?

There's also the question of whether Certified Wireless USB will be a pervasive standard. The industry group behind Bluetooth is working on creating a high-speed version of that technology, which also uses UWB. That would be a competing standard for UWB gadgets, but those products are still a couple of years away. Wi-Fi also has a lot of momentum, and is showing up in unexpected places, like cell phones.

And importantly, current UWB devices aren't legal in most countries outside the U.S., because of radio spectrum regulations. There are UWB chips in production that use other bands that are legal in most countries, but they have yet to show up in products.

Judging by the latest Belkin hub, UWB is at least a contender, and yes, we should probably get used to the thought of having another wireless technology to keep track of, alongside Wi-Fi and Bluetooth.

—

<http://www.belkin.com>

<http://www.iogear.com>

<http://www.gefen.com>