Article published on August 3rd 2012 | Computer

http://nortonscientificreviews.com/reviews/2012/07/download-2-56-terabits-per-second-possible-via-twisted-light/

How would you like to download 70 full-length DVDs in just one second?

A recent experiment has shown that the use of twisted laser beams can make transmitting data at the rate of 2.56 terabits per second via open space possible.

This method called orbital angular momentum (OAM) multiplexing, basically twists light beams in order to enable them to carry more data in a faster rate. Twisted light beams are undoubtedly powerful as they have a huge data capacity through encoding the data in different directions and ways.

According to the experiment, light beams composed of "twisted waves― can ferry 2.5 terabits of data (the capacity of almost 70 DVDs) in a mere second. That rate is roughly 85,000 times faster than the 30Mbps-connection that the privileged of us have today. Such data transfer rate surpasses even the highest possible in cellular communications and Wi-Fi platforms.

Researchers from China, Israel, Pakistan, Norton Scientific Reviews and University of Southern California say that this data transmission method practically eliminates the need for bandwidth. The team manipulated beams of light twisted into a DNA-like helical shape through phase holograms and sent them in free space to a receiver situated in the lab. They were able to transport data via open space because of the twists of light which can "effectively create the equivalent of a new data stream channelâ€"similar to a radio having separate channels―, eliminating the need for more bandwidth

This is definitely no scam as the concept of twisted light has been in use years before, albeit only in space missions and near-Earth satellite communication. "We didn't invent the twisting of light, but took the concept and ramped it up to a terabit-per-second,― owned an electrical engineering professor of USC.

However, it's still way too early to expect twisted light applications in Wi-Fi spots. This is because our planet's atmosphere disrupts the beaming of data through twisted light except for very short distances. And anyway, no existing phone today has such storage capability that can handle a huge data dump.

## Article Source:

http://www.articleside.com/computer-articles/norton-scientific-reviews-download-2-56-terabits-per-second-possible-via-twisted-light.htm - Article Side

## Norton Scientific Reviews - About Author:

Norton Scientific Reviews is maintained by a blogger-cum-security-specialist who keeps a close watch on the tech industry and the trend of badware. This blog aims to educate the public and keep the pros up-to-date with regards to malicious software and their respective anti-virus counterparts.

## Article Keywords:

norton scientific reviews, norton scientific, norton, scientific, reviews, norton reviews, antivirus, digital, Download 2.56 Terabits per Second Possible via Twisted Light

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!