

THE NEW IPAD

GALAXY NOTE

OS X 10.8

PS VITA

ENGADGET DISTRO

GALAXY TABS

FILED UNDER [Internet](#), [Science](#)

Researchers create 26 terabit-per-second connections with just a single laser

By Terrence O'Brien posted May 23rd 2011 7:22PM



Remember that pair of [100 terabit-per-second connections](#) we told you about earlier this month? Impressive? Sure, but not entirely practical thanks to the massive banks of lasers (370 to be exact) that guzzled several kilowatts of electricity. Researchers at the Karlsruhe Institute of Technology in Germany haven't hit 100Tbps yet, but they were able push 26Tbps using just one, lonely laser. The new single-laser fiber-optic speed record was set using a technique called fast Fourier transform that pulses light at an incredibly high rate with data encoded in 325 distinct colors across the spectrum. A detector at the receiving end is able to distinguish between the various colored data streams, based on tiny differences in arrival time, and recombine them into a high-speed torrent of ones and zeros. The scientists behind the project believe that, eventually, the technology could make its way into commercial use and be integrated into silicon chips. Now, someone needs to hurry up and jack our FiOS connection into this thing -- all this talk of terabits-per-second and [graphene modulators](#), yet we're still jealous of [grandma Löthberg](#).

SOURCE [BBC](#)

157

MORE COVERAGE [Nature Photonics](#), [ScienceDaily](#)

Like 701 people like this. Be the first of your friends 0 0 0 0

26 terabits per second, 26TerabitsPerSecond, data, fiber, fiber optic, fiber optics, FiberOptic, FiberOptics, germany, internet, Karlsruhe Institute of Technology, KarlsruheInstituteOfTechnology, KIT, laser, lasers, record, records, research, speed record, SpeedRecord

Comments for this page are closed.

Showing 1-50 of 160 comments

Sort by **Newest first** [Subscribe by email](#) [Subscribe by RSS](#) Real-time updating is **enabled**.

Real-time updating is **enabled**.

FEATURED BREAKING



HTC Sense 4 review
1 hour ago



HTC One S review
1 hour ago



HTC One X review
1 hour ago



How would you change Samsung's Galaxy Nexus?
4 hours ago



Inhabitat's Week in Green: gigantic LED cube, synthetic bones and a playground from recycled wind turbines
7 hours ago

FACEBOOK ACTIVITY



Audiophiles can't tell the difference between Monster Cable and coat hangers

2.919 Personen empfehlen das.



Student hacks into Facebook, gets eight months in prison, twelve likes

379 Personen empfehlen das.



Next Xbox console to be six times more powerful, headed for fall 2013 release?

1.739 Personen empfehlen das.

Soziales Plug-In von Facebook

MOST COMMENTED

The most commented posts on Engadget over the past 24 hours.

[How would you change Samsung's Galaxy Nexus?](#)

694