



## News & Comments

## 1.02 Petabits Data Per Second is New Data Transmission Speed Record

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Using fiber over a 51.7 km distance, the new record for fiber data transmission is now 1.02 petabits of data per second breaking their previous record of 319 terabits of data transmission per second over fiber using wavelength division multiplexing technology.

The record was set in the lab of Japan's National Institute of Information and Technology, and the major difference this time is that the new record is achieved with technology compatible with existing cable infrastructure.

It's like 10 million channels of 8K broadcasting per second and 1 lakh times faster than 5G.

Using four cores instead of one, they effectively quadrupled the data routes while keeping the cable size the same. As well as optimizing and boosting signals, the team also decoded data.

By balancing distance and speed, they set this record. Due to the difficulty of maintaining high speed over a long distance. In the future, both transmission speed and distance will be improved.

The team <u>said</u>, "It is hoped that this result will help the realization of new communication systems able to support new bandwidth-hungry services."

## **KEYWORDS**

Data transmission speed record, data transmission

