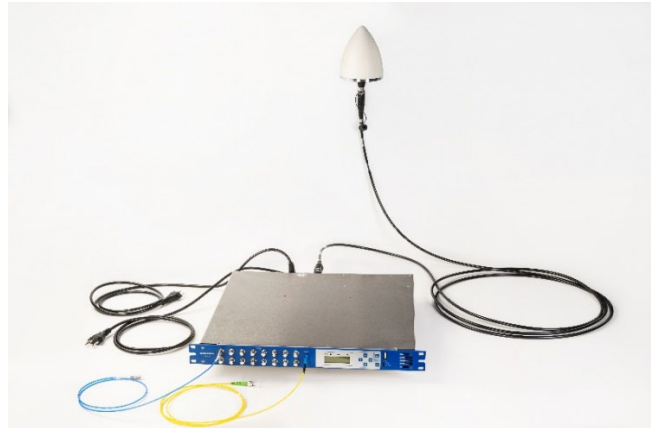
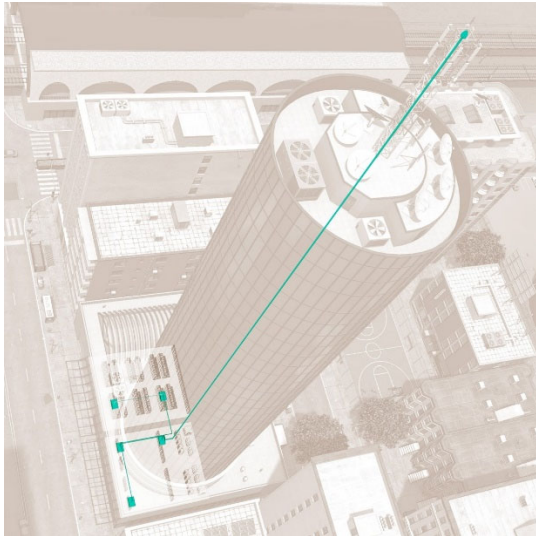


## Copper-free data link transforms traditional GNSS antenna technology



**Precise time synchronization for high-performance networks has now been enhanced through the world's first truly copper-free, fiber-powered connection. The new GNSS-over-Fiber solution from HUBER+SUHNER not only offers transmission of accurate time information, but also enables power supply via fiber.**

The Global Navigation Satellite System (GNSS) combined with Power over Fiber offers many advantages to telecom providers operating in the 5G or data center markets.

"As data volumes and transmission speeds increase, so do the requirements for accurate time synchronization: GNSS timing signals are used in many major infrastructures – from data centers, larger shopping malls to financial institutions," says Dominik Tibolla, Product Manager at HUBER+SUHNER. "Thanks to the GNSS satellite signal, it is possible to use the time information from atomic clocks, which can be transmitted over longer distances with low loss using optical fiber."

Typically, GNSS antennas are powered via a conventional power connection utilising copper technology, which leads to an increased installation effort due to the laying of a separate conductor cable. The GNSS and Power-over-Fiber solution from HUBER+SUHNER eliminates the need for this additional power supply, as the fiber optic connection to the antenna takes over this part and simultaneously transports the received data. New power supply lines as well the often complex building permits can be bypassed to save costs.

GNSS and Power-over-Fiber solutions go beyond where existing technology could reach. Transmissions of several kilometers between antenna and receiving system is now possible compared to the previous limit of just a few meters. Optical transmission enables the use of existing in-building fiber optic infrastructure and distributes the GNSS signals to every corner of the building. This provides security against external manipulation or environmental influences while enabling reliable transmission and flexible handling. In addition, using the fiber-to-power system provides unlimited distribution of the time signal reference with reduced environmental impact.

HUBER+SUHNER's new GNSS and Power-over-Fiber solution can work with existing infrastructure and can be easily extended to adapt to future challenges if necessary.

Learn more

For more information about GNSS and Power over Fiber, please visit the HUBER+SUHNER website [INSERT LINK].

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**HUBER+SUHNER Group**

The globally active Swiss company HUBER+SUHNER develops and produces components and system solutions for electrical and optical connectivity. The company serves the three main markets Industry, Communication and Transportation with applications from the three technologies of radio frequency, fiber optics and low frequency. HUBER+SUHNER products excel in excellent performance, quality, reliability and long service lives - even under the most demanding conditions. Through a global production network, combined with subsidiaries and representatives in over 80 countries, the company is close to its customers worldwide.