

New HUBER+SUHNER SYNCRO family simplifies optical timing integration for data center operations

'The most important thing in life is time' – a common statement that many people are familiar with and associate with their lifetime. But time can also be of crucial importance in its smallest form.

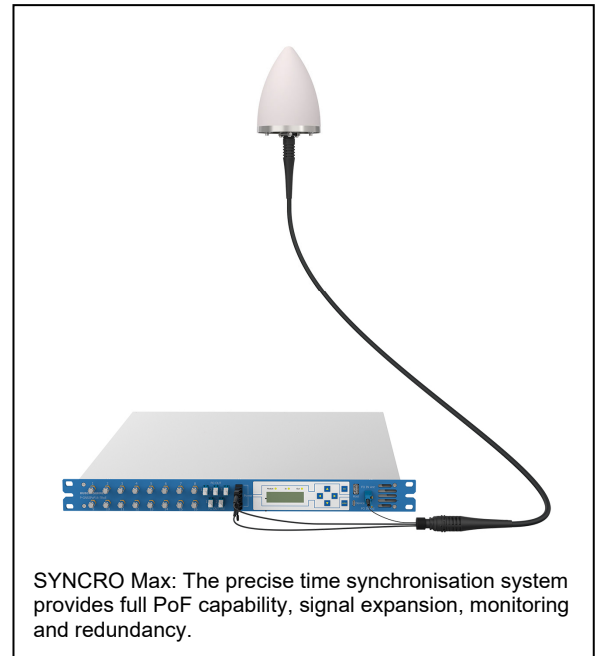
Nanosecond accurate time synchronisation is essential for global trade, stock exchanges, mobile communications, navigation, and geodesy. Now data center operators requiring precise time synchronisation can integrate optical timing into existing fiber architectures – enhancing performance and reducing costs – with the new SYNCRO solution from HUBER+SUHNER.



The SYNCRO family is an integrated, modular timing and Global Navigation Satellite System (GNSS) distribution portfolio designed for rapid deployment and reliable performance by extending transmission distances, reducing the number of required GNSS antennas, and eliminating many limitations of coaxial cabling.

GNSS provides the reference time used across modern networks and critical infrastructure. GNSS signals originate from satellites carrying atomic clocks, with the extreme stability of those clocks acting as the basis for international timekeeping and enabling sub nanosecond synchronisation when distributed correctly.

Building on previous GNSS and Power-over-Fiber (PoF) offerings, SYNCRO delivers secure, precise timing synchronisation over fiber, while preserving nanosecond accuracy across an operator's network. PoF is a key advantage of the SYNCRO approach as optical fiber carries both the GNSS timing signal and required energy to remote antenna assemblies, allowing rooftop or remote antennas to be powered without separate electrical wiring. Crucially, SYNCRO integrates seamlessly into an operator's existing fiber network, reusing optical infrastructure to deliver both signal and safe, centrally managed power to remote GNSS antenna locations.



“The increasing computing requirements as a result of advancing digitalisation, particularly in cloud computing, artificial intelligence (AI) and location-independent working, mean that data center operators must constantly upgrade or create new capacities,” says Dominik Tibolla, Product Manager at HUBER+SUHNER. “Operators are looking for solutions that scale the performance of modern data centers in a future-proof manner, upgrade existing infrastructures with minimal effort and ensure maximum security, reliability and comprehensive monitoring, including antenna redundancy. SYNCRO has been developed to support operators in these efforts.”

By expanding our current offering, SYNCRO is available in three customisable product sets so customers can select the right balance of power, monitoring, and redundancy for their operations. The SYNCRO Max provides full PoF capability and signal expansion, monitoring, and redundancy for the most demanding deployments. SYNCRO Eco delivers the signal expansion and monitoring features of the Max without PoF for customers that do not require remote powering. Simpler applications that do not require PoF or redundancy can utilise the SYNCRO Mini, which still maintains monitoring and signal expansion capabilities.

By moving timing distribution onto fiber, SYNCRO eliminates many installation constraints and reduces planning overhead. The plug-and-play design removes the transmission distance limits of

Media release

Date 20 October 2025
Location Herisau, Switzerland
Page 3 of 3

HUBER+SUHNER

coaxial cabling, reduces the need for reinforced ducting and extensive grounding to protect against lightning surges, and allows longer secure transmission between antennas and receivers.

“SYNCRO gives customers a timing solution that transmits, receives, and expands GNSS signals across data centers with greater reliability and lower total cost of ownership,” continued Tibolla. “Operators can consolidate GNSS antennas, shorten installation times, and reallocate infrastructure and operational budgets to higher-value projects while preserving precise, resilient timing and positioning.”

The new SYNCRO family from HUBER+SUHNER will be on display at the upcoming [International Timing and Sync Forum](#) in Prague, Czech Republic, on October 27–30, at booth #29.

More information about SYNCRO can be found on the HUBER+SUHNER website:
<https://www.bktel.com/gnss-over-fiber.htm>

More to explore

This media release can also be found under <https://www.hubersuhner.com/en/company/media/news>

Media contact

Trade media
Proactive International PR
hubersuhner@proactive-pr.com

HUBER+SUHNER
Jim Mack
pressoffice@hubersuhner.com

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.