Synchronization Support System for Telecommunication Networks

The Synchronization Support System (SWS) is a set of specialized devices and solutions developed at the Poznań University of Technology for generating, distributing, measuring, and assessing the quality of time and frequency signals in telecommunication networks.

The system includes time and frequency signal sources, distributors, and multichannel measurement systems. SWS solutions are based on proprietary fast synchronization methods and algorithms for determining the quality parameters of time and frequency signals in real time. The scope of work covers the full device development process – from hardware design and prototyping, through firmware and software, to the integration and customization of solutions to meet the requirements of other systems.

SynRb – Mobile Synchronization Signal Source

- The SynRb is a mobile synchronization signal source equipped with a rubidium oscillator.
- It provides four in-phase 2048 kHz reference signals with electrical parameters compliant with ITU-T G.703.13.
- The source can be synchronized with an external periodic signal with a frequency from 1 Hz to 10 MHz and a level from 1 Vpp to 12 Vpp, or with a signal from the built-in GPS/GLONASS/Galileo receiver.
- The design of the device enables mobile operation and its use as a precise reference source during field measurements.

