The privately hold company has more than 12,000 employees and is grouped in four business fields. The market segment automotive belongs to the test and measurement business field. The company started the development of oscilloscopes about ten years ago. Today, it supplies a range of them. Additionally, software packages for Classical CAN and CAN FD are available. In respect to cybersecurity and CAN-based networks, Rohde & Schwarz cooperates with Vector Informatik – another CiA member (we reported already in the CAN Newsletter Online). For high-speed networks such as CAN XL, Rohde & Schwarz does joint developments with Rosenberger.

Oscilloscopes support CAN

All Rohde & Schwarz oscilloscopes support triggering and decoding of CAN data and remote frames. The instruments can process DBC files. For detailed analysis, results can be visualized as color-coded frames and/or in a table format. Errors are identified by means of hardware-accelerated triggers. You can trigger on start-of-frame (SOF) bit, CAN-ID (identifier), data field content, and various error conditions.

Symbolic decoding of CAN-IDs is possible as well as on-screen,
time-correlated serial decoding with serial data waveforms. The oscilloscopes can show eye-diagram masks to evaluate the physical layer quality. The CAN software package also supports CAN FD.

Most of the CiA members are device suppliers. Toolmakers and instrument suppliers, such as Rohde & Schwarz, are in the minority (29 from more than 720). Most CiA members need such products for development and testing purposes. “Oscilloscopes are necessary to make proper network designs,” said Juergen Meyer. “Rohde & Schwarz offers a complete range of instruments from low-end to high-end.” In the near future, they will also support CAN XL. “We intend to participate in the CAN XL plugfests,” promised Meyer.

Holger Zeltwanger, CiA Managing Director