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IVN2Eth Capture Module
CM CAN COMBO

APPLICATION

Capture your CAN(–FD), FlexRay and RS–232 traffic in the car via an Ethernet uplink

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DESCRIPTION

In the era of autonomous and connected cars, one key challenge for the test and validation is the reliable capture of relevant in-vehicle-network (IVN) traffic from different communication technologies inside the vehicle.

With the **CM CAN Combo** from Technica Engineering, the traffic from the conventional CAN buses, as well as CAN-FD, FlexRay, and RS-232 can be captured without interfering with the original networks.

The traffic is captured without influencing the network and is delivered with a 40 ns time resolution timestamp.

Several Capture Modules, of the same or different types, can be combined and used together on the same measurement network. Thanks to the built-in time synchronization, all the devices will act as one, allowing to share a common understanding of time for all the connected buses and Ethernet networks (100BASE-T1 & 1000BASE-T1). This makes Capture Modules very scalable and allows to add other in-vehicle-network (IVN) technologies to the measurement setup.

Many additional features make this device appropriate for general-purpose testing, such as the definition of active filters, triggering of user events, traffic injection.

FEATURES AND FACTS

- ✔ 6x CAN / CAN-FD
- ✔ 1x FlexRay (channel A)
- ✔ 2x RS-232/TTL
- ✔ Technically Enhanced Capture Module Protocol (TECMP), which is royalty free and provides timestamping, source information, etc. (natively supported in Wireshark (v3.4), GPL C libraries for conversion to PCAPNG available at https://github.com/Technica-Engineering)
- ✔ Configure easily via webserver or via dedicated UDP frames
- ✔ Network Time Synchronization supporting several standards- allows to synchronize multiple CM CAN Combos or other Capture Module variants
- ✔ Cascading for synchronization of multiple devices
- ✔ Source Timestamping with 40 ns resolution
- ✔ High-speed startup
- ✔ Startup buffer
- ✔ Output traffic shaping
- ✔ CAN/CAN-FD/FlexRay Transmission (with a license)
- ✔ Rotary switch for manual configuration of the device IP address (Gbit, RJ-45)
- ✔ Wake-up capable (also via CAN/-FD)
- ✔ Extended power mode for car integration
- ✔ Optimized for automotive and automotive-like use-cases
- ✔ High voltage range: 12 to 24 volt DC
- ✔ Robust galvanized sheet steel with black powder coated housing
- ✔ Size: 129x 120 (134) x 32 mm

TECMP is compatible with PLP Protocol

6x CAN/ CAN-FD	1x FLEXRAY 2x RS232/TTL	1x GIGABIT ETHERNET (RJ-45)	1x SYSTEM CONNECTOR