

HARDWARE AND SOFTWARE TOOLS FOR TESTING AND VALIDATING AUTOMOTIVE NETWORKS

CAPTURE MODULES

Capture and log messages from a variety of bus topologies are captured, timestamped (the same timestamp across different bus systems) offers five variants to cover Automotive Ethernet (100BASE-T1 and 1000BASE-T1), as well as common IVN technologies (CAN, CAN-FD, FlexRay, LIN).

CM MULTIGIGABIT

CAPTURE YOUR AUTOMOTIVE MULTIGIGABIT TRAFFIC IN THE CAR WITHOUT INTERFERING THE ORIGINAL NETWORK



The **CM MultiGigabit**, enabled through new PHY technology, can be set to log three different data rates:

- 2.5 Gbit/s (2.5 GBASE-T1)
- 5 Gbit/s (5 GBASE-T1)
- 10 Gbit/s (10 GBASE-T1)

CM CAN COMBO

CAPTURE RELIABLY ALL RELEVANT IN-VEHICLE-NETWORK (IVN) TRAFFIC FROM DIFFERENT COMMUNICATION TECHNOLOGIES INSIDE THE VEHICLE



The **CM CAN COMBO** can capture traffic from the conventional CAN buses, as well as CAN-FD, FlexRay, and RS-232 can be captured without interfering with the original networks



MEDIA CONVERTORS

Establish a physical layer conversion between Automotive Ethernet connections (100BASE-T1 or 1000BASE-T1) and any device with a standard Ethernet Network Interface Card (NIC) with an RJ-45 connector.

100BASE-T1 MEDIA CONVERTER_BCM



Converts IEEE 100BASE-T1 100 MBit/s full-duplex (1 x unshielded twisted pair - UTP) to Fast Ethernet 100BASE-TX

1000BASE-T1 MEDIA CONVERTER



Converts IEEE 1000BASE-T1 (1000 MBit/s full duplex) 1x unshielded twisted pair (UTP) to Gigabit Ethernet (1000BASE-T)

SWITCH-BASED PRODUCTS

Allow for a managed, multi-directional exchange of Ethernet messages

ENHANCED ETHERNET SWITCH

AUTOMOTIVE ETHERNET SWITCH WITH AVB/TSN FEATURES TO TEST AND ANALYZE VEHICLE NETWORKS



- 8x 100/1000BASE-T1 ports (MATenet, H-MTD variants) or 8x 1000BASE-T ports (RJ-45 variant)
- 2x SFP+ ports for Logging data output (up to 10Gbps each)
- 1x 100BASE-TX Fast Ethernet Port for configuration
- Selectable connector interface between MATenet, H-MTD, or RJ-45 connector, depending on the intended customer use case

Control system/
Logger

1000BASE-T Ethernet
(RJ-45)
10Gigabit Ethernet
(SFP+)

Enhanced Ethernet Switch
MATenet, H-MTD or RJ-45

IEEE regular 1000BASE-T
100/1000BASE-T1

Vehicle Ethernet
Devices