

100/1000BASE-T1 MEDIA CONVERTER

THE NEW GENERATION OF PHYSICAL LAYER CONVERSION BETWEEN AUTOMOTIVE ETHERNET AND YOUR PC SYSTEM



DESCRIPTION

The **100/1000BASE-T1 MediaConverter** from Technica Engineering establishes one direct point-to-point connection between your Automotive Ethernet ECU and any Standard Gigabit system. This product has two variants. These variants provide the same functionality however have different connectors (H-MTD and MATEnet) for commissioning of automotive gigabit ethernet.

It transmits data frames directly from the **physical layer 100BASE-T1 or 1000BASE-T1** and the **physical layer 100BASE-TX or 1000BASE-T**, with a deterministic and constant delay of roundabout 2 μ s.

No packets are stored or modified. Technica Engineering's new generation of MediaConverters adapts to market trends and provides the user with innovative, practical solutions (such as End-of-Line (EoL) testing, Automated Hardware-in-the-Loop (HiL), and DV and PV applications) for multipurpose testing under diverse scenarios.

It enables a seamless Standard Ethernet to Automotive Ethernet conversion, through the combination of **RJ-45 and H-MTD/MATEnet connector**.

The **100/1000BASE-T1 MediaConverter** is the ideal **smart easy-to-manage solution** for working efficiently with Automotive Ethernet. It uses Automotive grade connector and fulfils the increasing need for testing validation solutions of state-of-the-art communication technologies in next generations of vehicle systems.

FEATURES AND FACTS

- 1 Port 100/1000BASE-T1 Automotive Ethernet with Marvell 88Q2112 A2 Transceiver (100/1000 MBit/s Full duplex on a single Twisted Pair with MATEnet/H-MTD connector)
- 1 Port 100BASE-TX / 1000BASE-T Standard Ethernet with RJ-45 connector
- Power MQS connector
- System MQS connector
 - Input signal enabling "force slave mode" and "force link down"
 - Output signal providing signal "link status"
- Micro USB-B connector (to connect serial interface for advanced configuration)
- 4 DIP Switches for easy configuration
 - Master/Slave
 - 100/1000 Mbit/s
 - Legacy/IEEE Mode
 - Frame Generation
- Status LEDs
- Voltage range: 6V to 30V DC (typ. 12V)
- Robust galvanized sheet steel with black powder coated housing
- Size 89 x 72 x 28mm

APPLICATION



PC/TEST SYSTEM

Standard Gigabit Ethernet
RJ-45 Connector



100/1000BASE-T1
MEDIACONVERTER

100/1000BASE-T1



DEVICE UNDER TEST
100/1000BASE-T1