TOSUN

TE1051

100Base-Tx 1000Base-T
100/1000Base-T1 Interface Tool

Classic Application:

- Vehicle Ethernet Remaining Bus Simulation
- Vehicle Ethernet Data Monitoring and Analysis
- Vehicle Ethernet Communication Testing

Feature Overview

TE1051 is a tool with a 1-channel Ethernet-to-USB interface. Users can transfer data from a standard Ethernet mode (100Base-Tx, 1000Base-T), or vehicle Ethernet mode (100/1000Base-T1), via the USB interface to a PC. Through the TSMaster software, Ethernet data emulation, analysis, and testing can be performed. It also enables functionalities like DoIP, SOMEIP, and more.

TE1051 is compact, robust in design, requires no external power supply, and is user-friendly.

- Vehicle Ethernet interfaces: TE MATEnet and Rosenberger H-MTD
- LED indicators displaying vehicle/standard Ethernet operational status
- LED indicators showing system status, including rate, master/slave, and USB status
- Automotive-grade design, ARXML file support for parsing vehicle Ethernet messages in TSMaster
- Support for DoIP and SOMEIP protocols
- Supplementary Windows API interface for secondary development, supporting Ethernet packet RAW format reception, transmission with timestamps, transmission completion events, and CRC modification
- Provides TCP/IP example projects based on API interfaces and lwIP protocol stack, facilitating secondary development
- Loopback maximum rate approximately 7 Mbyte (full-duplex)
- Operating temperature range: -40°C to 80°C
- Product dimensions: Aluminum alloy shell measuring 110X70X36 mm

Characteristics

- Hardware packet timestamping at the hundred-microsecond (µs) level
- Plug-and-play design for Windows 10/11 systems, driver installation required for Win7
- 1 channel support for 100Base-Tx, 1000Base-T, 100/1000Base-T1, switchable via software at any time

Specification

Channel	Standard Ethernet 100Base-Tx, 1000Base-T, or vehicle Ethernet 100/1000Base-T1
PC Interface	USB 2.0
Ethernet Interface	RJ45 with TE MATEnet or Rosenberger H-MTD
Driver	Plug-and-play design for Windows 10/11 systems; driver installation required for Win7
Timestamp Precision	Hardware packet timestamping at the hundred-microsecond (μs) level
Isolation Method	Network transformer/capacitor isolation
Power Supply	USB-powered
Operating Temperature	-40°C to 80°C
Enclosure Material	Aluminum
Size	110mm*70mm*36mm

Ordering Information

Product name	Model	Feature description
Bus interface devices	TE1051	1-channel vehicle Ethernet to USB interface

Shipping list

· TE1051 main unit (with USB cable)
· TE MATEnet or Rosenberger H-MTD cables
  (not included, need to be ordered separately)