

TC1013



Product Overview

The TC1013 is a portable and easy-to-install device launched by TOSUN, providing a dual-channel CAN FD bus to USB interface. With a maximum speed of 8 Mbps, it connects to a PC via a high-speed USB 2.0 interface, designed with driverless compatibility for Windows and Linux systems.

Paired with the robust TSMaster software, it supports loading DBC and ARXML database files, enabling convenient monitoring, analysis, and simulation of CAN FD bus data. Additionally, it facilitates functionalities such as UDS diagnostics* ECU flashing, CCP/XCP calibration, and more.

The device offers secondary development APIs for Windows and Linux, supporting development environments such as C++, C#, LabView, and Python. This flexibility allows seamless integration into diverse testing systems, ensuring efficiency and user-friendliness.

Key Features

- Hardware message timestamping at the microsecond (μ s) level
- Portable design with mounting holes for integration
- High-speed USB 2.0 interface with driverless compatibility (Windows & Linux)
- CAN channel isolation up to DC2500V
- Automotive-grade design supporting dbc, a2l, blf, and asc formats
- Adjustable CAN bus baud rates from 125 Kbps to 8 Mbps
- Support for recording data in blf and asc formats with offline/online playback
- Supports UDS diagnostics and CCP/XCP calibration
- Support for UDS-based Flash Bootloader

- Secondary development interfaces for Windows and Linux
- Built-in 120-ohm terminal resistor (software configurable)
- Ability to load all paid licenses for TSMaster

Technical Specifications

- Network Device: 2 x CAN FD
- PC End: High-speed USB 2.0 interface
- CAN End: DB9 interface
- Driver: Driver-free for Windows and Linux
- Buffer: Each channel supports up to 1000 CAN frames
- CAN: Supports CAN 2.0A, 2.0B (ISO11898-1), baud 5 Kbps – 1 Mbps
- CAN FD: ISO and non-ISO, baud 125 Kbps – 8 Mbps
- Terminal Resistance: Built-in 120-ohm, software configurable
- Timestamp: 1 μ s hardware message timestamp
- Messages Sent/sec: Max. 20,000 (single channel @ 1 Mbps)
- Messages Received/sec: Max. 20,000 (single channel @ 1 Mbps)
- Isolation: CAN channel DC2500V, ESD \pm 8 KV
- Power Supply: USB powered
- Casing Material: Plastic
- Operating Temperature: -40 °C to +85 °C
- Operating Humidity: 10% – 90% (non-condensing)

Connector Pinout

- Pin 2: CANFD_Shield
- Pin 3: CANFD2_Low
- Pin 4: CANFD2_High
- Pin 5: CANFD_GND
- Pin 7: CANFD1_High
- Pin 8: CANFD1_Low

Ordering Information

Product Name: TC1013

Model Number: Dual-channel CAN FD to USB interface

Scope of Supply:

- TC1013 device
- DB9 female to two DB9 male CAN cable