

# TC1014

---



## Product Overview

The TC1014 is a portable and easy-to-install 4-channel CAN FD to USB interface device launched by TOSUN. It supports rates up to 8 Mbps and connects to a PC via a USB 2.0 interface. The device is designed with a driverless architecture for Windows and Linux systems, ensuring excellent system compatibility.

Paired with the powerful TSMaster software, it supports loading DBC and ARXML database files for convenient monitoring, analysis, and simulation of CAN FD bus data. It also supports UDS diagnostics, ECU flashing, CCP/XCP calibration, and more.

The secondary development APIs for Windows and Linux support various development environments such as C++, C#, LabView, and Python. This makes it highly efficient and easy to integrate into diverse testing systems.

## Key Features

- Hardware message timestamping at the microsecond ( $\mu$ s) level
- CAN channel DC 2500 V isolation
- Adjustable CAN bus baud rates from 125 Kbps to 1 Mbps
- CAN FD with baud rates up to 8 Mbps (ISO and non-ISO)
- Recording in blf and asc formats with offline/online playback
- Supports UDS diagnostics and CCP/XCP calibration
- Supports UDS-based Bootloader flashing

- Supports information security testing
- Secondary development APIs for Windows and Linux
- Built-in 120-ohm terminal resistor, software configurable
- Capable of loading all paid licenses for TSMaster

## Technical Specifications

- Network Device: 4 x CAN FD
- PC Interface: USB 2.0
- CAN Interface: DB9
- Driver: Driver-free (Windows & Linux)
- Buffer: Each channel supports up to 1000 CAN frames
- CAN: Supports CAN 2.0A/B (ISO11898-1), baud 125 Kbps – 1 Mbps
- CAN FD: ISO and non-ISO, baud 125 Kbps – 8 Mbps
- Timestamp Accuracy: 1  $\mu$ s hardware message timestamp
- Terminal Resistor: Built-in 120-ohm, software configurable
- Messages Sent/sec: Up to 20,000 (per channel)
- Messages Received/sec: Up to 20,000 (per channel)
- Isolation: DC 2500 V, ESD  $\pm$ 4 kV (contact),  $\pm$ 8 kV (air)
- Power Supply: USB powered
- Power Consumption: 2.5 W
- Casing Material: Metal
- Dimensions: Approx. 108 × 88 × 35 mm
- Weight: ~234 g (device only), ~605 g (with packaging)
- Operating Temperature: -40 °C to +80 °C
- Operating Humidity: 10% – 90% (non-condensing)

## Connector Pinout D-sub (9 pin) - 1

- Pin 2: CAN FD\_Shield
- Pin 3: CAN FD3\_Low
- Pin 4: CAN FD3\_High
- Pin 5: CAN FD\_GND
- Pin 7: CAN FD1\_High
- Pin 8: CAN FD1\_Low

## Connector Pinout D-sub (9 pin) - 2

- Pin 2: CAN FD\_Shield
- Pin 3: CAN FD4\_Low
- Pin 4: CAN FD4\_High

- Pin 5: CAN FD\_GND
- Pin 7: CAN FD2\_High
- Pin 8: CAN FD2\_Low

## Ordering Information

Product Name: TC1014

Model Number: 4-channel CAN FD to USB interface

Scope of Supply:

- TC1014 device
- USB cable
- DB9 female to dual male CAN signal cable (CAN)