

TC1014

Multi-channel CAN FD bus interface.







Classic Application:

- Whole vehicle multi-channel CAN/CAN FD bus data acquisition
- · Domain controller testing
- · Various automated testing systems

Feature Overview

TC1014 features a 4 channel CAN FD bus to USB interface with a maximum speed of 8 Mbps. It connects to a PC through a high-speed USB 2.0 interface and is designed with driverless compatibility for Windows systems, ensuring system compatibility.

Paired with the powerful TSMaster software, it supports loading DBC and ARXML database files, facilitating convenient monitoring, analysis, and simulation of CAN FD bus data. Additionally, it supports functional capabilities such as UDS diagnostics, ECU flashing, CCP/XCP calibration, among others.

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

Characteristics

- Microsecond (us) level hardware message timestamping, meeting high-level requirements
- High-speed USB 2.0 interface with driverless design for Windows and Linux systems, ensuring system compatibility
- CAN channel isolation up to DC2500V
- Automotive-grade design, supporting dbc, a2l, blf, asc, and arxml files
- · Adjustable CAN baud rate from 125Kbps to 8Mbps
- Supports recording data in BLF and ASC formats for both offline and online playback
- · Capable of supporting UDS diagnostics
- Capable of supporting CCP and XCP calibration
- · Supports UDS-based Flash Bootloader
- Supports information security testing
- Supports secondary development interfaces for Windows and Linux systems
- · Built-in 120-ohm terminal resistor, software-configurable
- · Capable of loading all paid licenses for TSMaster



Specification

Channel	4 x CAN FD	
PC End	High-speed USB 2.0 interface	
CAN End	2 x DB9 connectors	
Driver	Driverless design for Windows and Linux systems, ensuring	
	system compatibility	
Buffer	Each channel supporting a sending buffer of up to 1000 frames for CAN/CANF	
CAN	Supports CAN 2.0A, B protocols, compliant with ISO11898-1 standard,	
	baud rate from 5Kbps to 1Mbps	
CAN FD	Supports ISO and non-ISO standard CAN FD, baud rate from 125Kbps to 8Mbps	
Timestamp Precision	lus hardware message timestamp	
Terminal Resistor	Built-in 120-ohm terminal resistor, software-configurable	
Messages Sent per Second*	Maximum of 20,000 frames/second	
Messages Received per Second*	Maximum of 20,000 frames/second	
Isolation	CAN channel isolation up to DC2500V, electrostatic discharge level ±8KV	
Power Supply	USB-powered	
Enclosure Material	Aluminum	
Dimensions	100mm*80mm*30mm	
Operating Temperature	-40°C to 80°C	
Operating Humidity	10% to 90% (non-condensing)	
Operating Environment	Keep away from corrosive gases	

^{*}Single channel at 1Mbps with 0-byte data field scenario

Ordering Information

Product Name	Model Number	Function Description
Network Device	TC1014	4 channel CAN FD to USB interface

Shipping list

- · TC1014 device
- · USB cable
- 2 x DB9 female to 2 x DB9 male CAN cable

Pin definition

- · Left: CANFD 1/3
- Right: CANFD 2/4

