TC1011 – CAN FD ↔ USB Adapter

Product Overview

The TC1011 is a high-performance single-channel CAN FD to USB interface device from TOSUN, designed for industrial, automotive, and testing environments. It offers reliable, galvanically isolated CAN connectivity to a PC via USB, with no additional drivers for Windows and Linux.

Key Features

• Supports CAN 2.0A/B and (ISO/Non-ISO) CAN FD up to 8 Mbps
• USB 2.0 high-speed interface—driver-free on Windows; Linux supported
• Galvanic isolation up to 2500 V; contact ESD protection ±8 kV
• 1 µs hardware timestamping and hardware buffering (20k messages/s RX & TX)
• Supports automotive-grade formats: DBC, A2L, BLF, ASC, ARXML
• Protocol support: UDS diagnostics, CCP/XCP calibration, Flash Bootloader, information security testing
• Configurable 120 Ω termination resistor via software
• Compatible with TOSUN TSMaster software licenses, and APIs in Python, C++, C#, LabVIEW

Technical Specifications

Feature	Specification
USB Interface	High-speed USB 2.0 (driver-free for Win/Linux)
CAN Interface	CAN 2.0A/B and CAN FD (ISO/non-ISO)
CAN Speed Range	5 kbps – 1 Mbps (CAN), up to 8 Mbps (CAN FD)
Timestamp Resolution	1 µs
Isolation	2500 V DC (CAN side)
Buffering Throughput	Up to 20,000 messages/s RX & TX
Connector	USB Type-A; DB9 male (Pin 2=CAN_L, 3=GND, 5=Shield, 7=CAN_H)

Termination Resistor	Internal 120 Ω (software switchable)
Power Supply	USB-powered
Operating Temp. Range	–40 °C to +85 °C
Housing	ABS plastic
Certifications	Automotive-grade, CE, RoHS, ESD near ±8 kV
Protocols & Formats	DBC, A2L, BLF, ASC, ARXML; UDS, CCP/XCP