

TM2101

GPS to CAN/CAN FD Module



Scan the code to follow



Classic Application:

- Autonomous Driving
- Road Testing
- Fleet Management

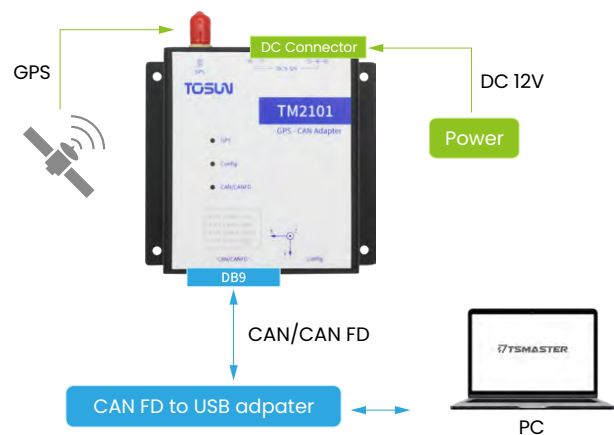
Feature Overview

The TM2101 can convert GPS and IMU information into CAN/CAN FD messages, easily integrating location, acceleration, attitude, and other data into any CAN/-CAN FD bus system. It provides reliable data support for vehicle systems, autonomous driving applications, precise navigation, and fleet management, ensuring the system receives real-time, accurate position and motion attitude information.

With the TSMaster software, you can conveniently configure nearly all related information, including CAN/CAN FD message IDs, location, and IMU settings. After configuration, a corresponding DBC file can be exported. Additionally, TSMaster allows loading of DBC files to parse all relevant information.

Characteristics

- Supports both CAN and CAN FD
- Built-in 120-ohm terminator, software configurable
- Supports GPS, BeiDou, GLONASS
- GPS supports up to 9 configurable NMEA sentences
- Button toggles config/user mode
- User-configurable data logging interval



Specification

Channel	1 x CAN/CAN FD
CAN End	DB9
Communication End	Configuration Mode: CAN 1Mbit/s User Mode: Configurable as CAN or CAN FD
CAN	Supports CAN 2.0A, 2.0B protocols, compliant with ISO11898-1 standard, with baud rates ranging from 125Kbps to 1Mbps
CAN FD	Supports both ISO and non-ISO standard CAN FD with baud rates from 125Kbps to 8Mbps
GPS	Default refresh rate 1 Hz, up to 10 Hz
IMU	16-bit resolution
Acceleration Range	±3g, ±6g, ±12g, ±24g
Gyroscope Range	±125°/s, ±250°/s, ±500°/s, ±1000°/s, ±2000°/s
Power Supply	DC 12V (Phoenix terminal or DC plug)
Power Consumption	1W (typical)
Casing Material	Metal
Dimensions	Approximately 80 x 113 x 24.3 mm (excluding antenna)
Weight	Approximately 110.2 g (without packaging) / approximately 405 g (with packaging and accessories)
Operating Temperature	-40°C to 80°C
Operating Humidity	10% to 90% (non-condensing)
Operating Environment	Keep away from corrosive gases

Ordering Information

Product Name	Model Number	Function Description
Network devices	TM2101	GPS/IMU to CAN FD/CAN Module

Shipping list

- TM2101 device
- 12V 2A Power Adapter
- GPS Antenna

Pin definition

