TOSUN

GW2112

2 CAN FD gateways/routers

Classic Application:

- Connect CAN bus devices to CAN FD networks
- Connect CAN FD bus devices to CAN networks
- Connect two segments of CAN/CAN FD networks with different baud rates
- Serve as a device isolating two network segments, achieving data filtering and conversion
- Act as a repeater to increase node load and extend communication distances

Feature Overview

GW2112 is a CAN/CAN FD relay and messagefor-warding device, boosting bus load capac tyand extending communication distance. It supports different baud rates of CAN/CAN FDnetworks and facilitates conversion bet-ween them.

With two configurable CAN/CAN FD interfaces, it supports both ISO standard CAN FD and non-ISO CAN FD standards. Users can freely configure the behavior and data routing between its two CAN FD channels.

GW2112 enables configuring basic informationfor the two CAN ports, The Pro version prioritizingse-curity features like message and configura-tionencryption for user information security.

Users can set conversion rules via TSMaster soft-ware and download them to the device via USB. GW2112 stores configured rules per-sistently, en-suring retention even afterpower loss.

Each interface is equipped with independent 2500VDC electrical isolation protection circuits, enhancing system reliability in harsh environ-ments.

Characteristics

- CAN/CAN FD channels, configurable as CAN or CAN FD
- Support for CAN 2.0A, B protocols, compliant with ISO11898-1 specifications. CAN channel baud rate ranging from 125Kbps to 1Mbps
- Support for both ISO standard CAN FD and non-ISO CAN FD standards, with CAN FD baud rates ranging from 125k to 8Mbps
- Configuration of message forwarding relationships, including ID conversion and various mappings of data within messages, through software

- The Pro version of the device supports signal mapping, mathematical operations, and various advanced functions such as configurable encryption algorithms
- The Pro version also supports custom functions like configurable encryption
- Two LEDs for displaying status information
- DC 2500V isolation for CAN channels

Specification

Channel	2 x CAN FD
PC End	USB
CAN	Supports CAN2.0A and B protocols, conforms to the ISO11898-1 specification, and has a baud rate of 125Kbps-1Mbps
CAN FD	Supports CAN FD that complies with both ISO and non-ISO standards, with baud rates from 125Kbps to 8Mbps
Terminal Resistance	Built-in 120 Ohm terminal resistor is configurable by software
Packet forwarding capability	11,000 frames/second
Forwarding Delay	<0.5 ms
Isolation	CAN channel DC 2500 V isolation
Power Supply	DC 8-36V
Dimensions	100 x 70 x 36 mm
Casing Material	Aluminum
Operating Temperature	-40℃～80℃

Ordering Information

Product name	Model	Feature description
Network Device	GW2112	2 Channel CAN/CAN FD Router
Network Device	GW2112 Pro	2 Channel CAN/CAN FD Router, supporting advanced features such as encryption

Version Comparisonon

Function	GW2112	GW2112 Pro
Channel (Basic Routing)	✓	✓
Filtering	✓	✓
Routing (Mapping, Message-level Splitting/Merging, Group Forwarding)	✓	✓
Routing (Splitting Signal Options)	✗	✓
Routing (Merging Signal Options)	✗	✓
Custom Functions (Including Various Encryption Algorithms, etc)	✗	✓

Shipping list

- GW2112 device
- Dual Magnetic Ring USB Cable *1

Pin definition

- CAN FD 1 / 2

PIN	Definition
PIN1	CAN FD 2_Low
PIN2	C_GND 2
PIN3	CAN FD 2_High
PIN4	CAN FD 1_Low
PIN5	C_GND 1
PIN6	CAN FD 1_High