

CAN-CBX-Bridge-FD

CAN Bridge for connecting CAN Classic and CAN FD Networks



Linking of CAN Classic and CAN FD Networks

- Linking of two CAN Classic or CAN FD networks with data buffering
- Enables the connection of CAN Classic and CAN FD networks
- Conversion of CAN Classic to CAN FD frames

User-friendly Configuration without Overhead

- Configuration via serial interface with generic protocol
- Engineered exactly for the purpose needed
- DIN-rail mountable

Filtering of Data Frames and Galvanic Isolation

- Data can be filtered by variable masking options
- Preconfigured configurations of baud rate and frame filter settings easily selectable via rotary switch
- Galvanic isolation of CAN networks to reduce ground loops



Linking two CAN Networks

The CAN-CBX-Bridge-FD module can link two independent CAN FD networks designed according to ISO11898-1:2015. The CAN FD interfaces are fully backwards compatible with CAN and can also be used in classical CAN applications. The networks can operate with different bit rates. The module works with a microcontroller, which buffers the CAN data in a local SRAM.

Programming

Using the serial interface, the CAN-CBX-Bridge-FD module can be easily configured via a terminal.

Configuration is safely stored in Memory

The configured parameters are retained in non-volatile memory even if the supply voltage fails.

CAN Interfaces

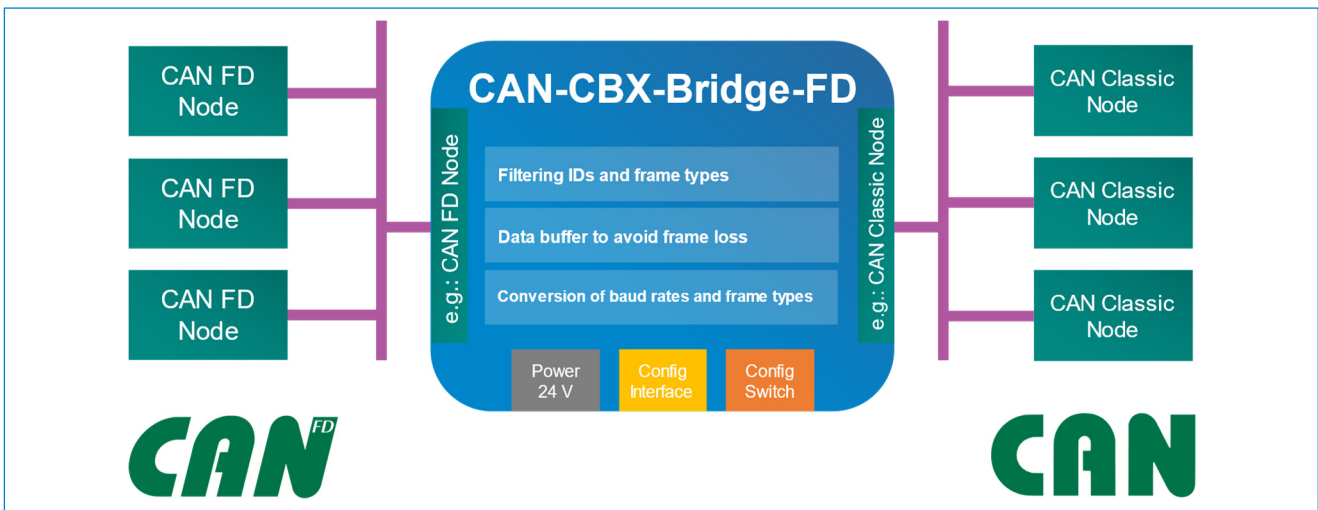
The ISO 11898-2-compatible CAN FD interfaces allow each a maximum data-transfer rate of 8 Mbit/s, or 1 Mbit/s for CAN Classic applications. The CAN interfaces are electrically isolated by optocouplers and DC/DC converters.

Modular Filter Masks for Identifier Filtering

Multiple masks for filtering frames by IDs are configurable.

This product is under development. It will be available Q2 2024.

All data specified here are preliminary and may be subject to change!



Technical Specifications:

Interfaces:	
CAN Interface	2 CAN FD interfaces, physical layer according to ISO 11898-2:2016, high-speed CAN Classic bit rates: 10 kbit/s up to 1 Mbit/s CAN FD bit rates: Up to 8 Mbit/s
Serial Interface	1x serial interface, 9,6 kbit/s for configuration
General:	
Power supply voltage	12 V DC... 32 V DC/ $I_{MAX_24V} = 35\text{ mA}$
Power consumption	$P_{MAX} = 1\text{ W}$
Ambient temperature	-20 °C ... +70 °C
Relative humidity	Max. 90 % (non-condensing)
Housing	Plastic housing (ME MAX)
Protection class	IP20
Dimensions	22.5 mm x 99 mm x 114.5 mm (Without mating connectors)
Weight	Maximum 125 g

General (Continued)		
Connectors	Serial: DSUB9 connector (RS-232), pin contacts CAN: PCB header, 5 pos., 3.81 mm pitch Power: PCB header, 4 pos., 5 mm pitch	
Order Information:		
Hardware		Order No.
CAN-CBX-Bridge-FD	Intelligent CAN Bridge for connecting CAN and CAN-FD networks, DIN-rail mountable	C.3090.02
Accessories		
CAN-Cable-S, 0.3 m (plug)	CAN cable assembly, metallised plastic housing, 0.3 m length, 1x DSUB9 plug and 3 wire end sleeves, performance level 2,	C.1323.03
Related Predecessor Product		
CAN-CBM-Bridge/2	Intelligent CAN Bridge for connecting CAN networks	C.2853.02