

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 port 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 ISO 11898-1:2015. The CAN FD ports are fully backwards compatible with CAN and can also be used in classical CAN applications. The networks can operate with different bit rates.

The CAN-CBX-Bridge-FD works with a microcontroller, which buffers the CAN data in a local SRAM.

Programming

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

Configuration is safely stored in Memory

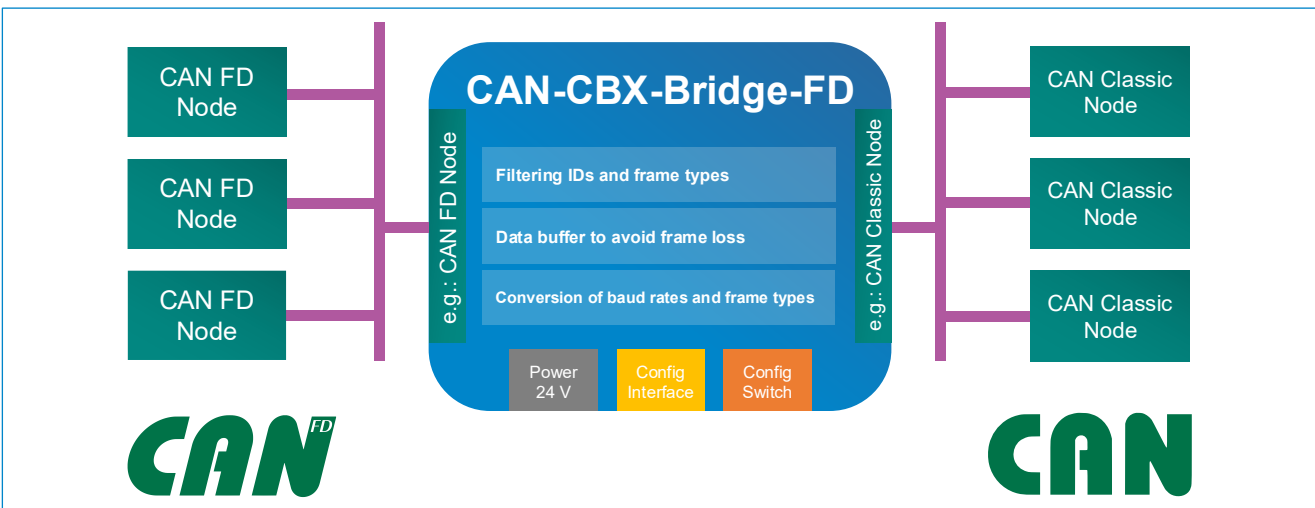
The configured parameters are retained in non-volatile memory even if the supply voltage fails.

CAN Ports

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

Modular Filter Masks for Identifier Filtering

Multiple masks for filtering frames by IDs are configurable.



Technical Specifications:

Ports:	
CAN port	2 CAN FD ports, 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 port	1 serial port, 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