

USB-to-CAN FD



For more information,
visit our website.

The Ixxat USB-to-CAN FD series with galvanic isolation is an easy, robust, versatile, and cost-efficient way to connect computers to CAN FD bus networks. The device family offers proven and very reliable performance for various CAN and CAN FD applications, e.g. in the field of automotive, mobility, test, development, maintenance or control applications.

By using powerful, durable hardware and providing a native USB 2.0 hi-speed connection (480 Mbit/s), the interfaces achieve very high data throughput while minimizing latency and power consumption.

A best-in-class time stamp resolution of only one microsecond allows lossless transmission and reception of standard and extended CAN messages on the CAN bus and enables filtering and buffering of CAN messages for very accurate CAN monitoring.

FEATURES AND BENEFITS

- CAN, CAN FD and LIN in one device
- Cost-effective and extremely versatile
- High-precision time stamp accuracy
- High data throughput combined with low latency
- Native USB 2.0 hi-speed (480 Mbit/s), compatible with USB 1.1 and USB 3.x
- Galvanic isolation
- CAN FD connection up to 8 Mbit/s
- Common driver interface for easy exchange of the PC interface type
- Powerful programming interface for Windows (VCI) as well as for Linux (socketCAN or ECI), QNX and VxWorks (ECI)

TECHNICAL DATA	USB-TO-CAN FD COMPACT	USB-TO-CAN FD AUTOMOTIVE
ORDER NUMBER	1.01.0351.12001	1.01.0353.22012
CAN FD/CAN channels	1	2
CAN bus interface	1 x D-Sub 9, CiA standard pinning according to CiA 303-1	2 x RJ45 socket (incl. 2 x D-Sub 9 adapter with CiA standard pinning according to CiA 303-1)
CAN bit rates	10 kbit/s to 1 Mbit/s	

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CAN FD bit rates	250/500 kbit/s arbitration rate with 500 to 8000 kbit/s data rate (predefined), user defined bitrate is possible.	
CAN bus termination resistors	-	
CAN controller	IFI CAN_FD IP/80 MHz	
CAN/CAN FD transceiver	MCP2562FDT	
Galvanic isolation	800 V DC for 1 sec., 500 V AC for 1 min.	
LIN bit rates	-	Max. 20 kbit/s
LIN transceiver	-	NXP TJA1020
LIN VBAT	-	8 to 18 V DC, 12 V DC typical
LIN channels	-	1
USB interface	USB 2.0 hi-speed (480 Mbit/s), compatible with USB 1.1 and USB 3.x	
USB connector	Type-A connector	
Microcontroller	32 Bit	
RAM	192 kByte	
Flash	512 kByte	
Power supply	+5 V DC/300 mA (via USB port)	
Dimensions	80 x 50 x 22 mm	
Weight	Approx. 100 g	
Operating temperature	-20 °C to +70 °C	
Storage temperature	-40 °C to +85 °C	
Protection class	IP40	
Relative humidity	10 to 95 %, non-condensing	
Certification	CE, FCC, UKCA	
Housing material	ABS plastic	
LED	2 x LEDs for CAN and USB communication	4 x LEDs for CAN 1, CAN 2, USB and LIN communication
Operating systems	Windows 11, Windows 10 (32/64), Windows 8 (32/64), Windows 7 (32/64), Linux	

CERTIFICATES



ACCESSORIES

ORDER NUMBER

Termination adapter for CAN/CAN FD (D-Sub plug to socket)

1.04.0075.03000

CAN cable 2.0 m (D-Sub plug to socket)

1.04.0076.00180

CAN Y cable 0.22 m

1.04.0076.00001

CAN Y cable 2.1 m

1.04.0076.00002

PIN ALLOCATION

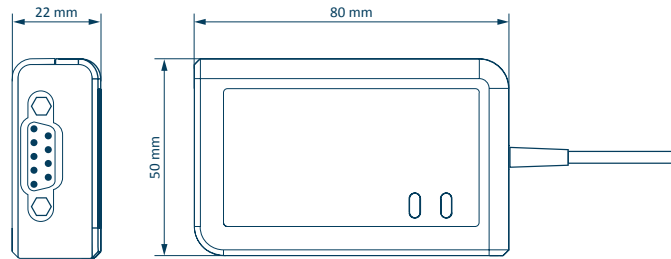
CAN CONNECTOR D-Sub 9



Pin no.	Signal
7	CAN-High
2	CAN-Low
3, 6	CAN-GND

USB-to-CAN FD compact
Order No. 1.01.0351.12001

TECHNICAL DRAWING



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