

USB-to-CAN V2 embedded



The Ixxat USB-to-CAN V2 embedded with galvanic isolation is installed via slot board and internal USB cable to a PC. It is an uncomplicated and cost-efficient way to connect a computer with an internal USB connection to a CAN bus network and can be used for e.g. in the field of test, development, maintenance or control applications.

Galvanic isolation reliably enhances the protection of the device against damage to electronics caused by voltage peaks.

FEATURES AND BENEFITS

- Cost-effective and extremely reliable
- High-precision time-stamp accuracy
- High data throughput combined with low latency
- PC installation via slot board and internal USB cable
- Galvanic isolation
- High-speed CAN connection up to 1 Mbit/s with 9-pin D-Sub plug
- 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)

ORDER NUMBER	1.01.0282.12001
CAN channels (high speed)	1
CAN bus interface	1 x D-Sub 9, CiA standard pinning according to CiA 303-1
CAN bit rates	10 kbit/s to 1 Mbit/s
CAN bus termination resistors	None
CAN controller	Internal; CAN 2.0 A/B
CAN high-speed transceiver	SN65HVD251D
Galvanic isolation	1000 V DC for 1 sec., 500 V AC for 1 min.
Time stamp resolution	150 - 250 μ s
USB Interface	USB 2.0 hi-speed (480 MBit/s), compatible with USB 1.1 and USB 3.x
USB connector	Internal cable USB 2.0 Hi-Speed (480 Mbps) with 5 pin female connector
Microcontroller	32 Bit
RAM	192 kByte
Flash	512 kByte
Power supply	+5 V DC (via USB port)

ORDER NUMBER	1.01.0282.12001
Power consumption	48 mA - max. 300 mA
Dimensions	67 x 40 x 18 mm
Weight	100 g
Operating temperature	-20 °C to +70 °C
Storage temperature	-40 °C to +85 °C
Protection class	-
Relative humidity	10 to 95 %, non-condensing
Certification	CE, FCC, UKCA
Housing material	-
LED	-
Operating Systems	Windows 11, Windows 10 (32/64), Windows 8 (32/64), Windows 7 (32/64), Linux



ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub male to female)	1.04.0075.03000
CAN cable 2.0 m (D-Sub male to female)	1.04.0076.00180
CAN Y cable 0.22 m	1.04.0076.00001
CAN Y cable 2.1 m	1.04.0076.00002

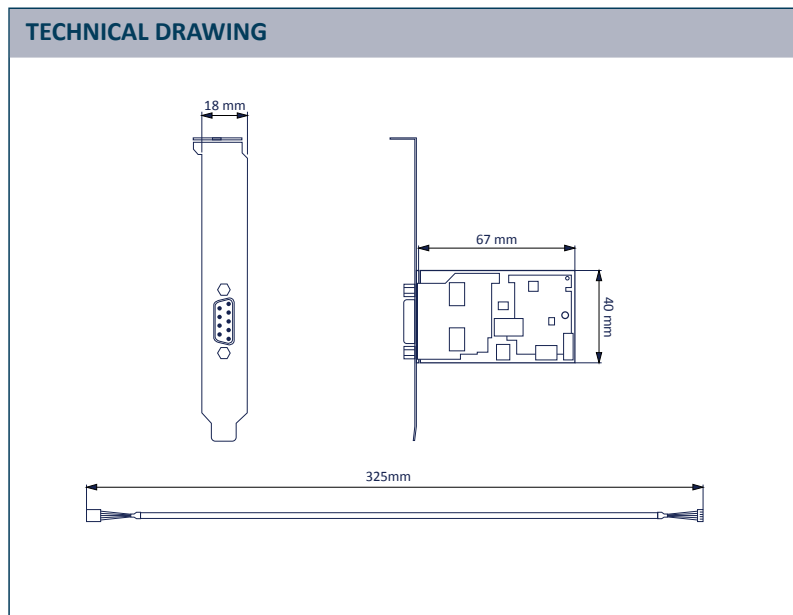
PIN ALLOCATION

CAN CONNECTOR D-Sub 9

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

5 PIN FEMALE CONNECTOR

Pin no.	Signal
1 Red	+5 V/voltage +/VCC
2 White	D-/data-/USB-
3 Green	D+/data+/USB+
4 Black	GND/voltage-/ground
5 Black	S-GND/over current/shielding



SOFTWARE SUPPORT

Drivers and programming interfaces

A comprehensive and stable driver and software package is available for the USB-to-CAN V2 series, which can be downloaded free of charge from ixxat.com/support.

The Ixxat driver packages for Windows (VCI) as well as Linux, INtime, RTX, VxWorks and QNX (ECI) also enable use in existing applications without software adaptation. The APIs for CANopen and SAE J1939 also support the USB-to-CAN V2 device family.

The VCI V4 (Virtual Communication Interface) is the driver interface for Ixxat interfaces under Windows and can be downloaded free of charge from ixxat.com/vci or ixxat.com/support. Customer-specific applications for communication via CAN, CAN-FD, LIN and Industrial Ethernet can be developed on the basis of the VCI.

Software tools

The software tool canAnalyser3 Mini is included in the VCI V4 download package and enables the first analysis steps and monitoring in CAN networks. Further information about the tools as well as Demo/Trial versions are available on the Ixxat webpage.