

# USB-to-CAN V2 professional



The Ixxat USB-to-CAN V2 professional with two CAN channels and galvanic isolation is a super versatile, uncomplicated and cost-efficient way to connect a computer to two CAN bus networks and is a very reliable workhorse for CAN applications 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.

Two RJ45 to D-Sub 9 adapter cables are included.

## FEATURES AND BENEFITS

- Cost-effective and extremely versatile and reliable
- 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
- 2x high-speed CAN connection up to 1 Mbit/s with 2x RJ45 sockets
- 2x RJ45 to 9-pin D-Sub adapter cable included
- 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	1.01.0283.22002
CAN channels (high speed)	2
CAN bus interface	2 x RJ45 (incl. 2 x D-Sub 9-Adapter with CiA standard pinning acc. 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 µs
USB Interface	USB 2.0 hi-speed (480 MBit/s), compatible with USB 1.1 and USB 3.x
USB connector	Type-A connector

<b>ORDER NUMBER</b>	<b>1.01.0283.22002</b>
Microcontroller	32 Bit
RAM	192 kByte
Flash	512 kByte
Power supply	+5 V DC (via USB port)
Power consumption	48 mA - max. 300 mA
Supply voltage	+5 V DC (via USB port)
Dimensions	80 x 50 x 22 mm
Weight	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	3 x LEDs for CAN 1, CAN 2 and USB communication
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



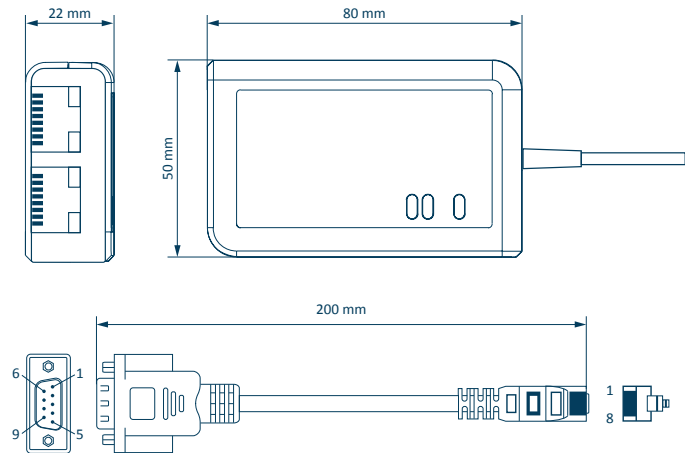
Pin no.	Signal
7	CAN-High
2	CAN-Low
3, 6	CAN-GND

### CAN CONNECTOR RJ45



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

## TECHNICAL DRAWING



## 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](http://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](http://ixxat.com/vci) or [ixxat.com/support](http://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.