DATASHEET

USB-to-CAN V2 compact

The Ixxat USB-to-CAN V2 compact with galvanic isolation is an uncomplicated and cost-efficient way to connect a computer to a CAN bus network. It is a very reliable tool 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.

FEATURES AND BENEFITS

- Cost-effective and extremely 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
- 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	1.01.0281.12001
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	-
CAN controller	Internal; CAN 2.0 A/B
CAN high-speed transceiver	SN65HVD251D
CAN low-speed transceiver	-
Galvanic isolation	1000 V DC for 1 sec., 500 V AC for 1 min.
Time stamp resolution	150-250 µs
LIN bit rates	-
LIN transceiver	-
LIN VBAT	-
USB interface	USB 2.0 hi-speed (480 Mbit/s), compatible with USB 1.1 and USB 3.x
USB connector	Type-A connector

ORDER NUMBER	1.01.0281.12001
Microcontroller	32 Bit
RAM	192 kByte
Flash	512 kByte
Power supply	+5 V DC/300 mA (via USB port)
Power consumption	48 mA-max. 300 mA
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
Operating systems	Windows 11, Windows 10 (32/64), Windows 8 (32/64), Windows 7 (32/64), Linux

CERTIFICATES

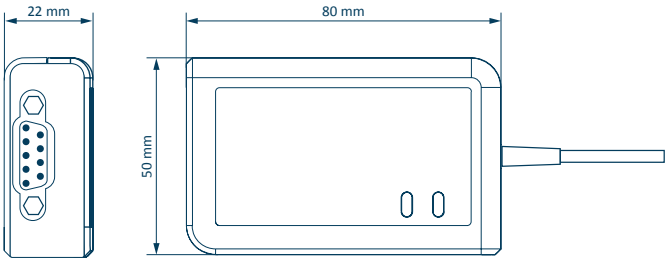

ACCESSORIES	ORDER NUMBER
Termination adapter for CAN/CAN FD (D-Sub plug to socket)	1.04.0075.03000
CAN cable 2.0 m (D-Sub plug to socket)	1.04.0076.00180
CAN Y cable 0.22 m	1.04.0076.00001
CAN Y cable 2.1 m	1.04.0076.00002

PIN ALLOCATION

CAN CONNECTOR D-Sub 9

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

TECHNICAL DRAWING



SOFTWARE SUPPORT

Drivers and programming interfaces

Comprehensive and powerful driver and software packages for the USB-to-CAN V2 series are available for free at ixxat.com/support. The driver packages can be downloaded for Windows (VCI - Virtual Communication Interface) and Linux (ECI), and are available on request for various real-time operating systems (INtime, RTX, Vxworks, QNX).

Using the Ixxat driver packages, customers can easily switch between the different PC interfaces offered by HMS. This would allow them to use USB, PCIe, Ethernet or other PC connections without changes to their application. The drivers support all protocols available on the interface with one API, so customers can easily access CAN, CAN-FD and LIN simultaneously and get the data with a common time stamp.

Softwaretools

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.