

USB-to-CAN V2

The IXXAT USB-to-CAN V2 is the next generation of the well-known IXXAT USB-to-CAN interface. With up to two CAN High Speed channels, one CAN Low Speed channel, and a LIN channel a wide variety of applications can be addressed in both the industrial and the automotive sectors.



Industries



Highlights

- ✓ High Performance: Minimum latency and high data throughput
- ✓ Robust and reliable – for use in rugged environments
- ✓ Comprehensive driver and tool support
- ✓ Easy exchange of the interface type without adaptation of the application due to standardized driver interface
- ✓ Compatible with the old USB-to-CAN compact and USB-to-CAN II industrial/automotive interfaces using the latest drivers
- ✓ OEM versions available
- ✓ Long-term availability and future-proof due to standard driver interface

Fields of application

- Mobile service access via USB for CAN and LIN systems
- Analysis and stimulation of devices and systems, e.g. in combination with the canAnalyser
- Configuration and testing of equipment and systems with IXXAT CANopen tools
- PC-based control applications, customer specific or based on the CANopen and SAE J1939 APIs

High performance

By using powerful hardware and connecting over USB 2.0 Hi-Speed (480 MBit/sec), these interfaces achieve very high data throughput with minimum latency and low power consumption. This allows them to provide the reliable, loss-free transmission and receipt of messages in CAN networks at high transmission rates and bus load. The messages are also timestamped and can be filtered and buffered directly in the USB-to-CAN V2.

Due to this, the interface are suitable for very demanding applications at maximum bus load and CAN bit rates up to 1 Mbit/second, for example simulation applications.





New variants

The USB-to-CAN V2 is available in different variants with either one or two CAN interfaces based on ISO 11898-2. In the USB-to-CAN V2 compact, the CAN connection is implemented as a sub-D9 plug or as an RJ45 connector. The versions that carry two CAN interfaces are connected via RJ45 connectors. Adapter cables to sub-D9 plugs are included with the devices. Additional options include galvanically isolated CAN interfaces, bulk variants, and support for ISO 11898-3 low-speed CAN and LIN.

The housing design supports creation of customer-specific variants branded with the customer logo.

Another variant is the IXXAT USB-to-CAN V2 for embedded use, which is designed without housing but with a slot board and adapted USB cable for installation into a computer.



TECHNICAL SPECIFICATIONS				
Product	USB-to-CAN V2 compact	USB-to-CAN V2 embedded	USB-to-CAN V2 professional	USB-to-CAN V2 automotive
PC interface standard	USB (V2.0, Hi-Speed)			
Microcontroller	32 Bit			
Fieldbus interfaces	1 x CAN	1 x CAN	2 x CAN	2 x CAN, 1 x LIN
CAN interface	CAN 2.0 A/B	CAN 2.0 A/B	CAN 2.0 A/B	CAN 2.0 A/B
CAN bus interface	ISO 11898-2	ISO 11898-2	ISO 11898-2	2 x ISO 11898-2 1 x ISO 11898-3 switchable
CAN connection	Sub D9 or RJ45 plug according to CiA 303-1	Sub D9 plug according to CiA 303-1	2 x RJ45 plug with RJ45/Sub-D9 adapter cable	2 x RJ45 plug with RJ45/Sub-D9 adapter cable
Galvanic isolation	optional (1 kV, 1 sec.)	1 kV, 1 sec.	1 kV, 1 sec.	1 kV, 1 sec.
Temperature range	-20 °C ... +70 °C			
Power supply	via USB port, approx. 250 mA	via USB port, approx. 250 mA	via USB port, 500 mA max.	via USB port, 500 mA max.
Certification	CE, FCC			
Dimensions	approx. 80 x 50 x 23 mm	approx. 75 x 40 x 15 mm (without slot board)	approx. 80 x 50 x 23 mm	approx. 80 x 50 x 23 mm
Order number	compact 1.01.0281.xxxxx	embedded 1.01.0282.12001	professional 1.01.0283.22002	automotive 1.01.0283.22042

Comprehensive driver and tool support

The current versions of the IXXAT driver packages for Windows and Linux (VCI and ECI) support the new USB-to-CAN V2 interfaces and also allow the use in existing applications without software adaptations – even when switching between different interface types. The IXXAT API for

CANopen and SAE J1939 supports the new USB-to-CAN V2 interface family. Besides the included monitoring tool “miniMon”, IXXAT provides powerful analysis and configuration tools for the new interfaces, e.g. the canAnalyser or the CANopen ConfigurationStudio.

Scope of delivery

- USB-to-CAN V2 interface in the compact, embedded, professional, or automotive variants
- Interfaces with RJ45 connectors are delivered with RJ45 on a sub-D9 adapter cable
- Operating manual
- CAN driver VCI for Windows XP, Windows 7, Windows 8
- CAN driver ECI for Linux (available for download from www.ixxat.com)
- Simple “miniMon” CAN bus monitor



Twincomm
de Olieslager 44
5506 EV Veldhoven
the Netherlands

T +31-(0)40-2301.924

F +31-(0)40-2301.923

E welcome@twincomm.nl

www.twincomm.nl