



DATASHEET

USB-to-CAN FD + canAnalyser Bundle

The Ixxat USB-to-CAN + canAnalyser bundle offers a comprehensive solution for connecting, diagnosing and analyzing CAN FD networks.

The bundle includes the USB-to-CAN FD automotive interface with two switchable CAN FD/CAN high-speed channels, LIN and galvanic isolation, to easily establish a connection between a computer and CAN FD/LIN networks. It is complemented by a canAnalyser 3 Standard software license, offering advanced functionalities for the testing, monitoring and troubleshooting of CAN FD and LIN based systems.

The combination of a robust hardware interface and easy-to-use software allows for real-time insights and efficient diagnostics for various applications e.g. in the field of test, development, maintenance or control applications.

FEATURES AND BENEFITS

- Powerful bundle including: 1x USB-to-CAN FD automotive interface, 1x canAnalyser 3 Standard license with USB dongle, 2x RJ45 to D-Sub 9 CAN adapter cables
- Complete solution combining hardware and software
- Supporting CAN, CAN FD and LIN based systems
- J1939, CANopen and Sequencer module
- Supports XML, CAN DB and LDF
- 2 x CAN FD connection up to 8 Mbit/s with 2 x RJ45 sockets
- 1 x LIN communication in master or slave mode (switchable frame format)
- Galvanic isolation
- 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)



Please note: Technical data on this datasheet only represents the USB-to-CAN FD automotive (order no. 1.01.0353.22012). For detailed information on other components of the bundle, please refer to the corresponding components.

ORDER NUMBER 1.03.0353.22012 CAN FD/CAN channels 2 CAN bus interface 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 250/500 kbit/s arbitration rate with 500 to 8000 kbit/s data rate CAN FD bit rates (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 -20 °C to +70 °C **Operating temperature** -40 °C to +85 °C Storage temperature **Protection class** IP40 **Relative humidity** 10 to 95 %, non-condensing Certification CE, FCC, UKCA Housing material **ABS** plastic LED 4 x LEDs for CAN 1, CAN 2, USB and LIN communication

ORDER NUMBER	1.03.0353.22012
Operating systems	Windows 11, Windows 10 (32/64), Windows 8 (32/64), Windows 7 (32/64), Linux

CERTIFICATES

ACCESSORIES	ORDER NUMBER
USB-to-CAN FD automotive	1.01.0353.22012
canAnalyser 3 Standard	1.12.0133.31000
CAN adapter cable 0.2 m (RJ45 to D-Sub 9)	1.04.0074.01000
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 2.1 m	1.04.0076.00002







SOFTWARE SUPPORT

Drivers and programming interfaces

Comprehensive and powerful driver and software packages for the USB-to-CAN FD 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.

Software tools

The software tool canAnalyser 3 Standard is included in this bundle product. It is designed for the analysis, development, and maintenance of various network protocols, including CAN, CAN FD, CANopen, SAE J1939, and LIN. The software provides access to higher-layer protocol interpretation, message interpretation based on user-defined databases, and displays of signals in graphical or text formats. You can send individual or cyclic messages, as well as transmit pre-defined message sequences. Installation is simply done by inserting the supplied CodeMeter-Stick into the USB port of a computer.

Further information about the tools as well as Demo/Trial versions are available on the Ixxat webpage.

