

# CAN-USB/3-FD

## USB 2.0 Module with CAN FD Interface

### CAN FD Network at USB 2.0

- USB 2.0 high-speed interface with data rates of 480 Mbit/s
- CAN FD interface with electrical isolation, ISO 11898-2 compliant CAN transceiver
- CAN FD bit rate up to 8 Mbit/s
- Powered via USB
- ARM® Cortex®-M7 Microcontroller
- Time stamped CAN messages with a resolution of 1 µsec

### Robust Alu-Micro Case with Status LEDs optionally available for DIN Rail Mounting

- Aluminium case, dimensions 55 mm x 54 mm x 25 mm
- Four LEDs show the state of the module and of the CAN bus
- USB cable included
- DIN rail mounting according to IEC/EN 60715

### Wide Range of Application

- Silent mode support for analysing tools
- Full compatibility with applications written for esd's NTCAN-API
- CANopen® and J1939 protocol libraries are available for Classical CAN applications
- Firmware can be updated in the field



### Powerful CAN-Interface for PC

The CAN-USB/3-FD module is a USB to CAN FD-interface that uses an ARM Cortex-M7 microcontroller. The module supports the USB 2.0 high-speed interface with data rates of 480 Mbit/s. The CAN-USB/3-FD-DINrail is equipped with a mounting rail holder for snapping onto TS35 DIN rails.

### CAN FD Interface

CAN-USB/3-FD comes with an ISO 11898-1:2015-compliant CAN FD interface. It is fully backwards compatible with CAN and can

also be used in Classical CAN applications. The CAN FD interface allows a data-transfer rate of up to 8 Mbit/s and is electrically isolated from other potentials by means of a digital isolator and a DC/DC-converter.

### Software Support

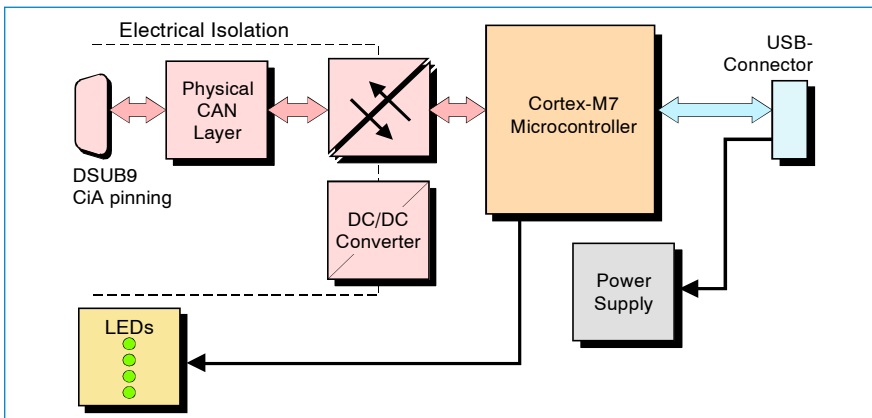
Software drivers for Windows®10/11 are included in delivery. Support of Linux® (kernel ≥ 5.19) via Linux CAN (SocketCAN) and NTCAN wrapper library, as well as drivers for other operating systems are available on request.

The firmware can be updated from the PC. Updates are available on the esd website. Libraries for the higher layer protocols CANopen and J1939 are available for Classical CAN applications.

Additional free-of-charge esd CAN tools for Windows are downloadable from our website. The tools offer efficient setup and analysis of CAN applications and networks.

### Customization on Request

Customized options are available for customized series production in reasonable quantities. Please contact our sales team for detailed information.



### Technical Specifications:

USB Interface and Microcontroller:	
USB	USB 2.0, bit rate 480 Mbit/s
Microcontroller	ARM Cortex-M7, 32-bit 300 MHz
CAN Interface:	
CAN interface	CAN FD interface acc. to ISO 11898-2:2016, differential, electrically isolated, bit rate up to 8 Mbit/s
General:	
Ambient temperature	0 °C ... +50 °C
Relative humidity	Max. 90 % (non-condensing)
Supply Voltage	via USB: 5 V DC
Case dimensions	55 mm x 54 mm x 25 mm
Protection class	IP20
Weight	70 g, optional 85 g with mounting rail holder
Connectors	CAN: 9-pin DSUB (plug) USB: series B-type USB (socket)

### Order Information:

Hardware	Order No.
CAN-USB/3-FD	1x USB 2.0, 1x CAN FD, ISO11898-2:2016, ARM Cortex-M7 Microcontroller C.2076.62
CAN-USB/3-FD-DINrail	CAN-USB/3-FD for DIN rail mounting C.2076.63

### Software Support<sup>1</sup>

Software drivers for Windows are included in delivery. Linux support via Linux CAN (SocketCAN) and NTCAN wrapper library.

Additional higher CAN layer protocols including CD-ROM for Classical CAN Application:

CANopen Stack for Windows (Object)	C. 1101.06
J1939 Stack for Windows (Object)	C. 1130.10

<sup>1</sup> For detailed information about driver availability for your operating system please contact our sales team.