

# CAN

## CANusb



### APPLICATION

CANusb is a handy CAN network interface suitable for stationary use with a desktop PC as well as for mobile applications together with a notebook.

### HARDWARE PROFILE

Equipped with a powerful 16-bit microcontroller, CANusb enables CAN data streams to be pre-processed and buffered up to a baud rate of 1Mbit/sec, thereby relieving the PC significantly. As a result, the real-time requirements of PC applications can be reduced drastically. The easy to use Plug&Play technology of USB frees the user from dealing with setup issues such as opening PCs, assigning interrupts etc. Connection to the PC is achieved simply via the USB cable. No additional power supply is required.

CANusb offers an opto-isolated CAN highspeed interface according to IS 11898 at its D-sub 9-pin connector.

### DRIVER SUPPORT

The 32-bit driver library for Windows 98 and Windows 2000 allows easy integration of CAN accesses into PC-based applications. In addition, application examples are available for integration in numerous off-the-shelf applications.

### PROGRAMMING INTERFACE

Thanks to the Common CAN Application Programming Interface (API), CANusb harmonizes excellently in the existing CAN product line. Therefore, migration to another hardware platform is possible at any time.

The Common CAN Application Programming Interface provides two operating modes:

#### CAN object memory

- Exchange of CAN messages via an object buffer which reserves memory space for send and receive objects
- Static mode (11-bit identifiers) with 2048 send and 2048 receive objects
- Dynamic mode (11- and 29-bit identifiers) with 200 send and 200 receive objects
- Allows remote-controlled and cyclic transmission with a minimum cycle time of 1ms
- Always holds a current image of the CAN distributed database, as applications for measurement and visualization frequently demand

#### FIFO operation

- Sequential storage of up to 255 send and receive messages
- De-coupling of CAN communication and PC application
- Message history containing time stamps with a resolution in microseconds



## TECHNICAL DATA

### Hardware

CAN interface Network interface according to CAN specification 2.0 B with CAN Controller SJA1000

Physical interface CAN Highspeed Interface in accordance with IS 11898 up to 1Mbit/s or customer-specific via piggyback

Electrical isolation Opto-isolated physical CAN interface

Microcontroller 16-bit controller SAB C165

Code/data memory 256 Kbytes FLASH, 256 Kbytes SRAM

PC interface USB V1.1, 12 Mbit/sec

Dimensions 110 mm x 55 mm x 25 mm

Temperature range

- Operation: 0..55 °C
- shipping and storage: -25..70 °C

EMC

- CE conformity according to EN 55022: 1994 class A and EN 50082-2: 1995 (industrial area)
- FCC part 15 subpart B limit A (industrial area)

### Software

Driver library CAN Layer 2; 32-bit DLL and driver for Windows 98 and Windows 2000

### System requirements

- IBM-compatible PC with USB connector
- Windows 98 or Windows 2000

### Scope of delivery

- CANusb hardware
- USB cable, 1m
- CANusb 32-bit DLL and Driver for Windows 98 and Windows 2000
- Sample software
- User manual (English)

On request, application examples showing how to link the programming interface in off-the-shelf applications

Additional software (optional): CANalyzer bus analysis software

## ORDERING INFORMATION

### CANusb

Please ask for more information and assistance



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