

CANUSB



This is a top seller among the Sontheim interface family. It facilitates a quick and sturdy connection between PC or notebook and CAN bus. CANUSB is highly flexible, user-friendly and market-proven. Thousands of units are already in the field, used for monitoring of CAN networks, setting parameters of machines or vehicles etc.

Housing

The device has a fairly rugged housing built of aluminum. Its compact design and resistivity against shock make it very popular in many areas of the automation and automotive industry.

CAN-channels

There are either 1 or 2 galvanically isolated CAN-channels available which comply with ISO 11898 -2. The transfer rate ranges up to 1 Mbit at 90 % bus load.

Flexible data processing

Its USB 2.0 interface enables the CANUSB to be used at any laptop, embedded PC or desktop PC. Once you have installed the driver you will benefit from 'HOT PLUG & PLAY' which is a connection of device to PC without restart.

Micro-controller and firmware update

The Motorola STAR12 and the Philips PDIUSB12 guarantee a quick data processing. Both CAN 2.0A and CAN 2.0B are supported. CANUSB is suited for numerous operating systems like Windows XP, XP embedded, Vista and 7. All firmware updates can be loaded via USB.

Key Features

Technically mature ...

- Future-proof USB
- Optimally suited for the use at PC or laptop
- 'Hot Plug & Play' for a quick and comfortable start
- MT CANapi for development of own applications
- Version with error frame detection and level measurement available

... and rugged

- Rigid aluminum extruded case
- 1 or 2 galvanically isolated CAN-channels with 1 Mbit transfer rate at 90 % bus load

Fields of application

- Service
- CAN-analysing
- Industry automation
- Development
- Testing bench
- Education
- CAN-test programs in DOS

Error frame detection

This feature allows surveillance and monitoring of a CAN network. The CANUSB possesses an own logic for detecting error frames and counting them up in a specific internal memory area. That is used for finding intermittent errors like falsified messages of a CAN participant.

Level measurement

This feature is designed for an analogue measurement of CAN levels. It is used for doing diagnostics at vehicles of all kinds or machines. Erratic level indicate for example short circuits. They are often responsible for data loss.

Programming interface

The CANapi provides all functions for programming own applications. It supports all Sontheim interfaces and several third-party devices which is why we enclose our SIECA132 MT-CANapi with 4 simultaneous handles at every interface dongle.

CANUSB Technical data

Hardware

Dimensions (L×W×H in mm)	100 × 57 × 32
Weight	166 g
Housing	Massive aluminum
CAN-interfaces	2 × galv. isolated acc. to ISO 11898-2
USB-interfaces	1 × USB 2.0
Maximum data transfer rate	1 Mbit / 90 % bus load
CAN-connector	1 × 7-pole plug
USB-connector	1 × standard USB plug type A
Power consumption	max. 350 mA at 5V
Power supply	Via USB
LEDs	2 × 3 mm LED
Cable USB	1 m standard USB
Cable CAN	optional 2m CANUSB cable
Operating temperature	0 °C to +70 °C
Humidity	20 % – 90 % non-condensing
Micro-controller CAN	Motorola Star 12, 16 Bit
Micro-controller USB	Philips PDIUSB 12
EEPROM	1024 Bytes for application data

Features

Error frame detection	Optional
Anlogue level measurement	implemented
LEDs	2 × CAN data 2 × CAN status 1 × USB status 1 × device status

Scope of delivery

1 × CANUSB	
1 × System-CD with driver SIECA132 MT-CANapi, hardware and software description (4 handles)	Win 98, ME, 2000, XP, Vista, 7 32 and 64 Bit

7-pole plug Pin assignment



US	USB Status
CS1	CAN Status 1
C1	CAN 1 receive / transmit action
GS	Device status
CS2	CAN Status 2
C2	CAN 2 receive / transmit action
1	CAN2 low
2	CAN 2 high
3	–
4	CAN 1 low
5	CAN 1 high
6	–
7	CAN 1 GND

USB-interface Pin assignment



1	VCC (VBUS)
2	– Data
3	+ Data
4	GND (Ground)

The Sontheim Modular Diagnostic Tool Chain

You can easily create your individual and professional diagnostic solution for the automation or automotive application with the help of the Sontheim interfaces and diagnostic software. Some examples of our customers' use cases are:

- CAN-data visualisation, monitoring and processing
- Parametrisation and control of whole CAN networks
- Vehicle diagnostics
- Flash processes of electronic control units (ECUs)



Products of interest

Industrial PCs	Page 62
CANexplorer 4	Page 98
MDT	Page 100
ODX-Editor	Page 105
SIECA 132 MT-CANapi	Page 94

Ordering information

Art.-No.	Description
V930204000	CANUSB 2xCAN, error frame, level measurement
V930205000	CANUSB 2xCAN, error frame
V930206000	CANUSB 2xCAN
V930207000	CANUSB 1xCAN, error frame, level measurement
V930208000	CANUSB 1xCAN, error frame
V930209000	CANUSB 1xCAN

Equipment

Art.-No.	Description
V930220000	CANUSB-cable, 2m, 120Ohm
V930220100	CANUSB-cable, 2m, (2x SubD9 male)