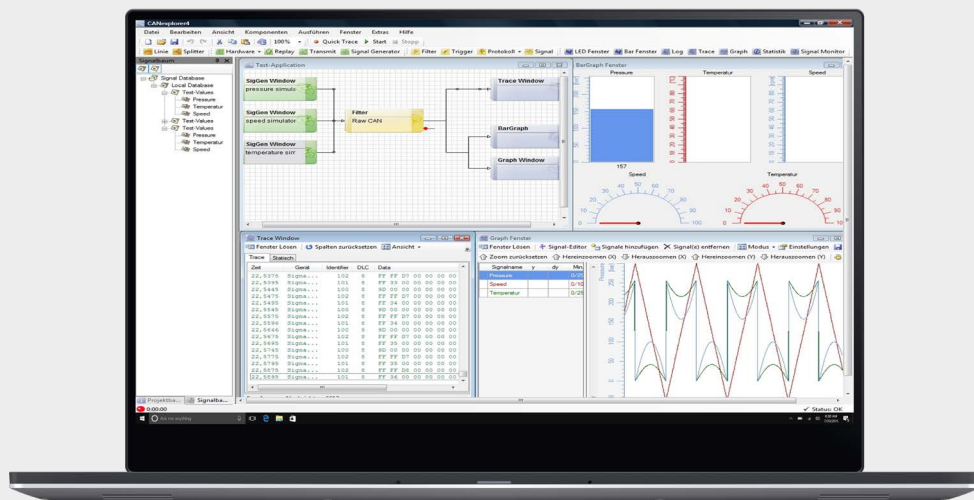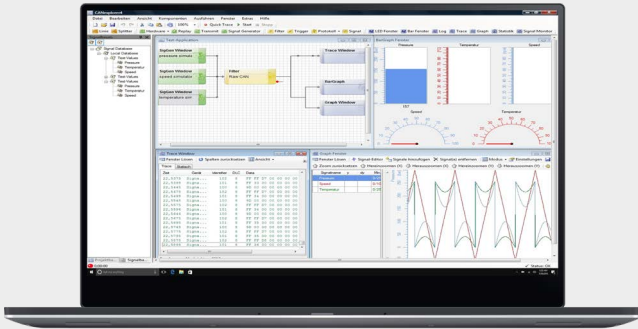# CANexplorer 4

Modular-based and efficient fieldbus-analyzing

CANexplorer 4

Modular, intuitive, efficient – CANexplorer 4 is a completely new developed field bus-analyzing software which represents the huge know-how in working with CAN networks in complex machines and vehicles. The new generation obtains a significantly enhanced range of functions and an improved handling. This makes the CANexplorer 4 a very intuitive and powerful tool.

Key Features

User-defined measurements setups with graphic elements and Drag and Drop

Receive, edit, transmit and abstract raw data

J1939-protocol support

CANopen-protocol support

Modular design with expansion options

Import and export from signal databases

Data processing

CANexplorer 4 offers various functions for processing CAN data, e. g. classical text-based traces, graphs, bar graphs, LEDs, filters and triggers. Generating a test set-up can be carried out by connecting different functional elements via Drag and Drop. This enables the software to consequently display complex processes in a visual and common manner.

Visualization

You can adapt the data visualization by defining triggers and filters. It is also possible to take an active part in the bus communication and generate and transmit messages that are also shown in a visualization. Have your telegrams sent manually, fully automatic or via trigger.

Data abstraction

Use an integrated protocol abstraction for automatically interpreting data to CANopen and J1939. The CAN data is then available as pre-processed and readable information. Further protocol stacks can easily be added with updates. All proprietary protocols and RawCAN data can be processed with a manual symbol editor. This tool is used for defining symbols and translating the payload of a CAN frame into comprehensible values.

Parallel processes

CANexplorer 4 obtains a multi-thread support for parallel usage next to other applications running on a PC and the visualization of various modules at the same time.

Overview of the most important modules:

Input:
CANexplorer 4 obtains various possibilities for manually or automatically creating CAN data as well as reading CAN messages at the bus.

	Signal generator **Transmit**	Creation of signal processes. Fast access to pre-defined CAN messages.
	Replay	Replay of previously recorded CAN log-data for an analysis of the CAN bus data. It is possible to apply original time-settings of the records.
	Hardware Inputs	Receiving and transmitting of CAN data. All Sontheim interfaces are supported, e. g. CANUSB, CANUSBlight and PowerCAN.

Processing:
Different filters provide a comfortable handling of the various CAN data. Moreover, the user can abstract the data to J1939 and CANopen.

	Filter	One can use filters for CAN identifier, areas of CAN identifier, data bytes and message types. The filters have a positive and a negative output.
	Protocol Filter	The integrated filters J1939 and CANopen offer an abstraction and pre-processing of CAN bus data traffic.
	Trigger	Creation of an event which can start a pre-defined operation. The user can choose between different triggers (e. g. data bytes of data bits) for a maximum of flexibility.

Visualization And Recording:
The modular-based design of the CANexplorer provides individual adaptation of the visualization and the display of specifically required data. The CAN bus traffic can be recorded and visualized easily via different elements. Of course, the various instruments can be chosen and configured according to the user's requirements.

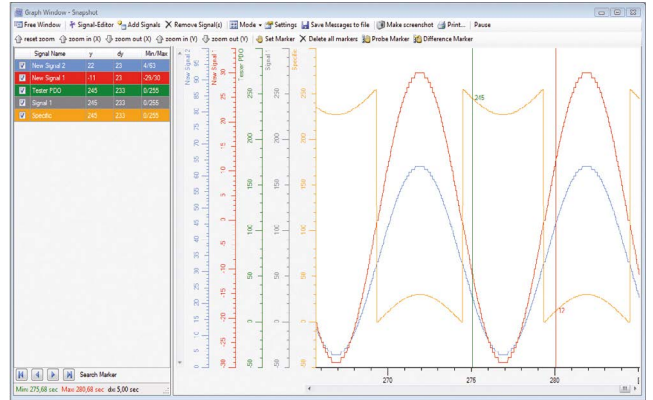|		
	Log Module	Easy writing of CAN messages into a log-file.
	Trace	Tabular display of CAN messages in the static or trace mode.
	Graph	Visualization of signals via graphs. Underlining events via placing of markers.
	Signal Monitor **Symbol Editor** **Bar-Graph Statistic**	Display of signals in a table, including minimum and maximum. Definition of symbols down to the Bit layer for a simplified and more lucid illustration of CAN information. Visualization of signals via bar-graphs or tachometer. Indication of bus statistics (e. g. amount of received / transmitted messages, bus-charge and others).

Technical Data

Operating system	Windows 2000 SP4, XP, Vista (32-Bit), 7, 8, 10
CPU	1,6 GHz Intel Pentium
RAM	512 MB
Graphics	1024×768 px, 16 mio. colors
Minimum hard disk space	min. 80 MB
Supported CAN Hardware	COMfalcon® CANUSB CANfox® CANUSBlight PowerCAN-PCI V1 and V2 PowerCAN-PC104+ PowerCAN-PCI104 V2 Other CAN hardware available upon enquiry

Features

Receiving and transmitting CAN messages	Signal generator with different signals (sinus, saw tooth, rectangle) Manual transmitting of definable CAN messages Cyclic transmitting of definable CAN messages Transmitting in block mode
Filter	CANexplorer 4 supports filtering for identifier, data bytes, symbols and message types
Trigger	Canexplorer 4 uses pre- and post-trigger
Signal datenbase	Saving of messages in a database as well as visualization via texts and graphic elements for intuitive handling Editor for generating and processing of signals (message, multiplexer, key, groups and signal) For both data import and export there are various data types supported
Visualization	Trace, graph, bar-graph, tachometer, symbol-monitor
Data processing	Writing in log-file, replay mode
Protocol support	RawCAN, CANopen, J1939, implementation of proprietary protocols upon enquiry
Bus statistic	Overview of transmitted and received messages bus-charge and CAN levels
Quick Trace	Quick monitoring of the CAN channels without previous creation of a test setup

Order information

V940340010	CANexplorer 4 Basis
V940340099	Software maintenance
V940340020	Extended graph
V940340021	Extended measurement setup
V940340022	BarGraph & Tacho, LED
V940340023	Protocol filter J1939
V940340024	Protocol filter CANopen
V940340025	Signal-generator
V940340026	DBC-import & export
V940340027	ASC-support
V940340029	Vector-support for CANcardXL
V940340030	Peak-support for PCAN-USB

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

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