CANLab
Network Analysis

INTUITIVE design

LOG SEND REPLAY CAN DATA

SUPPORTS
INDUSTRY LEADING INTERFACES

</> SCRIPTING FUNCTIONALITY

CAN FD READY

CANLab is a network analysis tool that provides a complete solution for CAN and LIN bus networks. Support for a variety of hardware interfaces and industry standard databases that support them is provided. It can be used to view network activity, send and receive signals/messages, record and replay data, manipulate and analyze data, and check statistics, all in real-time.

CANLab includes a variety of network analysis features, such as bus load, error counts or messages received. Display bus messages in real-time in a variety of different views, and log them for later analysis. Additionally message patterns can be highlighted to aid in viewing and troubleshooting the bus traffic.

Features

- Support many CAN hardware interfaces
- Supports both CAN and CAN FD
- Support for CAN DBC and LIN LDF files
- Import / export to multiple log file formats
- Offers analysis and scripting at no extra cost
- Provides a sophisticated strip chart recorder and replay
- CCP/XCP/KWP Protocol Decoders
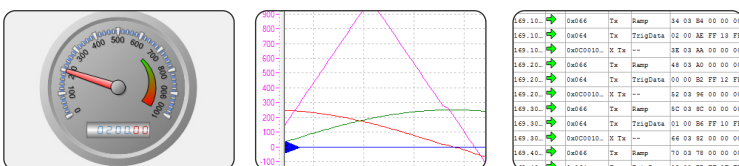
Recorded or 'live' signals and statistics can be graphed and analyzed simultaneously.

CAN BUS PRODUCTS

NETWORK SOLUTIONS

Logging or Recording

Instantly start or stop logging messages or recording signals conveniently by double-clicking on tabs that appear at the bottom of the CANLab application. Triggers can also be defined to control recorders and loggers.

Send

Select from pre-defined messages or custom defined messages to send on the bus. These may be sent individually or through grouped messages to define a sequence of messages. Customizable trigger events can be used to initiate transmitting the messages. This enables unlocking gateways, simulating controllers or debugging protocols for troubleshooting and validation using CANLab.
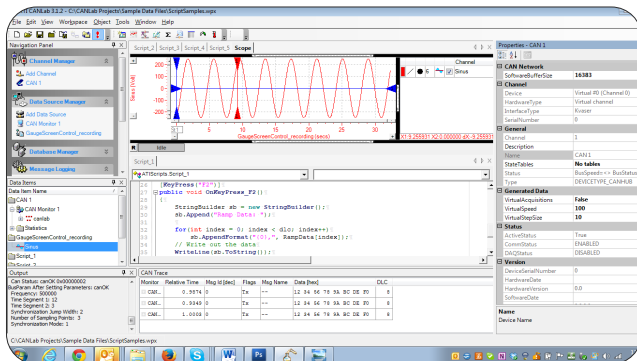
Post Data Analysis

Fully customize the view of the data in CANLab. Display data items using selectable columns that can include raw and converted values, absolute or relative message timestamps, comprehensive highlighting and trend arrows. For example, highlight messages or message groups by changing the color, font type or font size of a message in the trace window. Select highlighting features based on message IDs or conditions, such as value ranges or message properties like transmitted messages or extended identifiers.

CANLab's powerful Calculated Channel feature allows creation of additional signals without writing a script. For example, take the vehicle speed signal off the bus and calculate Acceleration and Distance. While CANLab provides a vast array of built-in math functions, the functionality can be extend by referencing a DLL that contains the user's functions. All of these tools are available to all CANLab users, making analyzing data as simple and powerful as possible.
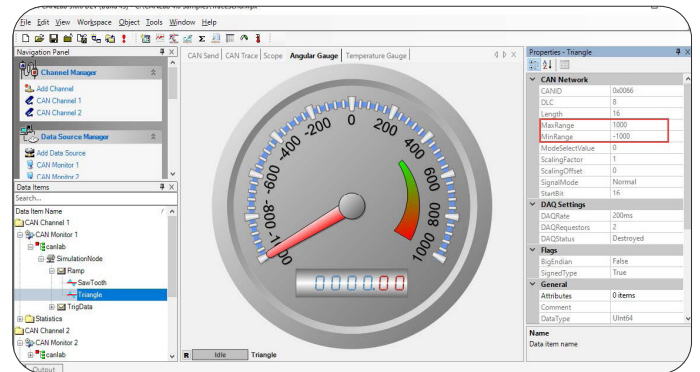
Replay

Playback of previously recorded CAN traffic is critical to network diagnostics. Simulate non-existent nodes or transmit real world data to test modules for validation using CANLab's Replay feature.

Trace

Effectively monitor bus traffic at message or signal levels in fixed or scrolling modes with CANLab's Trace window screen. When in fixed mode, decoded signal values can be expanded for ease of visibility. A variety of message filtering and highlighting capabilities allow further refining of the message display to aid in analysis.

Graphical Displays

CANLab features dials and gauges for viewing and analyzing signals to significantly improve the data analysis process. A strip chart recorder provides recorded or 'live' graphical viewing of signals and statistics simultaneously. Signal values can be time aligned to existing recorded data for quick real-time data analysis all on the same screen (window).
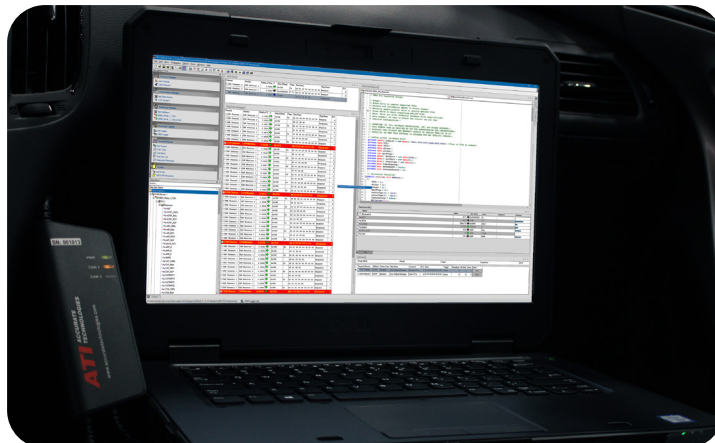
Scripting

CANLab's scripting language, included for all CANLab users, is full-featured with syntax based on the C# language. With a user configurable editor and syntax highlighting, it is easy to learn and delivers reliable, robust solutions.

In addition, CANLab scripts can run native within the CANLab application ensuring faster, real-time functionality. Compose complex functions to respond to different types of events such as 'On Message Received', 'On Signal Received', 'On KeyPress', and 'On Timer'. Extend CANLab's functionality to not only work with messages but also analyze data. Save scripts for distribution and use by other groups who can focus on performing the test rather than test setup.

ACCURATE
TECHNOLOGIES

Supported Hardware

- ATI CANary and CANary FD interfaces
- ATI Branded Kvaser interfaces
- Kvaser CAN and LIN interfaces that are supported by their latest driver. (available from Kvaser's website)
- Select Vector CAN interfaces that are supported by their latest driver (available from Vector's website)

CANLab Order Information

Part Numbers	Description
152-0300	CANLab Core Functionality
152-0305	J1939 Toolkit Applies J1939/21 to CANLab including PGN message decoding and Transport Protocol Support, and includes support for NMEA2000 and ISOBUS (ISO 11783) protocols. *Important: The J1939 Monitor usage requires the J1939 toolkit for the Database to properly decode the messages unless using ATI manufactured hardware (i.e. CANary and CANary FD).*
152-0304	LIN Toolkit Includes Master / Slave support and .LDF support *Important: KvaserLIN is only available with the LIN toolkit, while CANary LIN does not require a toolkit.*

ACCURATE
TECHNOLOGIES

sales@accuratetechnologies.com
www.accuratetechnologies.com

CAN BUS
PRODUCTS

NETWORK
SOLUTIONS

MEASURE • CALIBRATE • DEVELOP • OPTIMIZE • SUCCEED   **www.accuratetechnologies.com**