

# CANlog 3 and CANlog 4

## The Data Recorder for CAN and LIN Buses

Do you need a tool that can log messages from CAN and LIN buses and evaluate them later? Vector's CANlog 3 and CANlog 4 products give you the ideal data recorder for both simple and challenging logging tasks.

### Features and Advantages

CANlog 3 and CANlog 4 are the optimal tools for logging the data communication of a CAN and LIN system. Messages can be received, saved, and evaluated according to the loaded configuration. With its low current consumption in sleep mode CANlog is also an excellent choice for in-vehicle testing and use in test fleets.

#### Your advantages with CANlog 3 and CANlog 4 at a glance:

- > Use as a standalone tool for challenging logging tasks
- > Use in test fleets (sleep mode)
- > Complex trigger conditions
- > Analysis functions such as classing, rainflow analysis
- > Flexible configurations with the configuration tool; easy configuration with CANoe and CANalyzer
- > Offline analysis in CANoe and CANalyzer
- > Customized adaptations are possible (hardware, software)

### Functions

CANlog 3 and CANlog 4 each support up to four CAN channels. Furthermore, CANlog 4 has a CAN channel that can be used as a measurement channel. Optional I/O boards may be used to expand CANlog 3 and CANlog 4 with additional digital inputs and outputs, analog inputs, or a LIN interface. The data are saved in internal memory, and with CANlog 4 there is the option of saving data to interchangeable flash cards.

The configuration program included with the product allows the user to create a configuration customized for different applications and goals. There are functions for using CANlog as a data logger, classing device, gateway, tachograph, and for rainflow analysis.

### Application Areas

The main functionalities of CANlog can also be used simultaneously:

- > **Data Logger:** It is easy to filter, receive, log and send messages and signals using CANlog.
- > **Classing Device:** CANlog is especially well equipped for processing the logged data, editing it, and creating classing tables.
- > **Gateway:** If there is an ECU that should not be connected directly to the CAN bus, as an alternative CANlog could be used as a gateway for indirect bus interfacing.



**Project-related work**

As part of our support and service program we offer customized solutions for CANlog 3 and CANlog 4. Such work is contracted as a project-specific job.

**Integration**

The trigger conditions defined in CANalyzer and CANoe (single trigger or entire measurement) for logging a trigger block can also be utilized in CANlog.

Triggers are set up in the configuration for triggering on messages, signals, error frames, and message timeouts. Various message filters may also be set up in the configuration. Other complex trigger conditions can be formulated using the CANlog configuration language.

The logged data traffic can be read into CANalyzer and CANoe, where it can be evaluated using familiar analysis functions.

The interface for CANlog 3 and CANlog 4 is included in CANalyzer and CANoe, Version 3.1 or higher.

**Project Database**

A project database can be used to assign project-specific names, conversion formulas, units, and other attributes to messages and their signals.

The database is set up and maintained using the program CANdb++. It allows messages and their signals to be represented on the application level (e.g. CarSpeed = 210 km/h). It is easy to select such messages and signals when defining trigger conditions for CANlog.

CANdb++ is included with delivery of CANalyzer and CANoe.

Technical Data	
CAN channels	4 user-configurable CAN channels; CANlog 4: 1 measurement channel (TJA1041, Standard ID)
CAN interfaces	Piggyback boards: Low-speed: TJA1054, High-speed: 80C251, TJA1050, TJA1041, Single Wire: TLE6255G, Truck & Trailer upon request
LIN	8 LIN channels with external adapters, or 1 LIN channel on I/O board
Memory	Default is 2 MB; other options: CANlog 3: Flash memory of up to 64 MB CANlog 4: Flash card with up to 64 MB
Data transfer	CANlog 3: RS232 interface CANlog 4: Flash card reader (USB 2.0, 2.5 MBytes/s) or USB 1.1 interface on device
Logger capacity	From 4.3 million messages (for DLC 8) to 10 million messages (for DLC 0)
Data export	CANalyzer (ASCII or binary), MS Excel
Outputs	6 LEDs of which 4 LEDs are user-configurable Loudspeaker for signal sounds
Control inputs & outputs	2 TTL inputs/outputs, 1 output (V24 level) CANlog 4: 1 additional TTL output
I/O boards	Optional: Choice of board with digital inputs/outputs, or analog inputs, or one LIN interface
Supply voltage	5 V..45 V DC
Sleep mode	Current consumption approx. 135 µA (typ.) (with 4 wakeup-capable CAN transceivers)
Temperature range	-40 °C..+70 °C
Dimensions	CANlog 3: approx. 134 × 84 × 35 mm CANlog 4: approx. 140 × 144 × 37 mm

**Available I/O boards:**

- > D4I40: 4 digital inputs (0..45 V)  
4 digital outputs (5..45 V, 500 mA)
- > D4I40-L: Like D4I40 plus 1 LIN interface
- > A6I: 6 analog inputs (0..18 V, 12 bit resolution)  
4 inputs available to user, 2 inputs only internal
- > A6I-L: Like A6I plus 1 LIN interface
- > A8ID1: 8 analog inputs (0..18 V, 12 bit resolution)  
1 TTL input and output  
6 inputs available to user, 2 inputs only internal
- > A8ID1-L: Like A8ID1 plus 1 LIN interface
- > LIN Adapter: 1 LIN interface