

GL1000/GL1010 – Compact Logger

The Compact Data Recorder for Simultaneous Logging of 2 CAN, 2 LIN and 4 Analog Channels

Overview of advantages

- > Use as stand-alone tool for challenging logging tasks
- > Use in test fleets and for in-vehicle testing
- > Supports CAN and LIN bus wake-up and sleep mode
- > Save logged data on SD/SDHC memory cards
- > Short start time (typical: 150 ms)
- > Extensive filter and trigger conditions
- > Offline analysis in CANoe, CANalyzer, CANape, CANgraph
- > Easy configuration with graphical configuration tool and LTL (Log Task Language) support
- > Seed&Key support for protected ECUs
- > GL1010 as IP65 variant

Application areas

GL1000 is the optimal tool for logging CAN and LIN data communication. Messages are saved and evaluated according to the loaded configuration. The GL1010 is a variant with IP65 degree of protection and is especially suitable for applications in rough surroundings.

Due to its low current consumption in sleep mode, both Loggers are excellent for in-vehicle tests and use in test fleets. The compact housing eases the mounting in your vehicles – and the high capacity of the memory card allows the use for long-term recording. Additionally the tools support the logging of analog measurement data like battery voltage as well as internal ECU parameters via CCP/XCP during a test drive.

Functions

The GL1000/GL1010 lets you log CAN and LIN data as well as analog measurement data. For different use cases the data logger is configured with the configuration tool. The data are logged according to the configured filter and trigger conditions and are transferred to a PC by USB or memory card. After automatic conversion of the raw data, you evaluate the logged data with CANalyzer, CANoe, CANape or CANgraph.

General data logger functions

- > Easy to use graphical configuration tool
- > Configuration extension by LTL high-level language
- > Data logging of CAN and LIN messages on SD memory card (up to 2 GB) or SDHC memory card (up to 32 GB)
- > Readout of measured data via USB interface or commercially available card reader
- > Conversion of data into BLF, ASC, MDF format, MS Excel
- > Sleep mode while the bus is sleeping
- > Wake-up via CAN, LIN or wake-up line (ignition)

Filter functions

- > CAN/LIN identifiers
- > Channel filter
- > Symbolic messages (DBC/LDF files)



Included with Delivery (Standard)

- > GL1000 Logger or GL1010 Logger
- > Graphical configuration tool (Windows XP SP2)
- > Configuration tool for LTL
- > USB cable
- > Connection cable with open ends for voltage supply, CAN, LIN, inputs and outputs
- > Documentation
- > Fast automotive-capable 2 GByte SD memory card
- > Mounting bracket

Optional Accessories

- > Various CAN bus transceivers
- > CANgps (see datasheet for Logger accessories)

Project related work

As part of our support and service program we offer you customized solutions for GL1000/GL1010. Such work is contracted as a project-specific job.

Please contact us at:
logger@vector.com

Trigger functions

- > Configurable trigger with separately configurable pre- and post-trigger times
- > Configurable ring buffer on memory card, from 2 MB to 2 GB
- > Single-shot trigger, i.e. one-time initiation of the trigger
- > Support of triggering on CAN/LIN identifiers, data contents, symbolic signals and messages (DBC/LDF files)

CCP/XCP logging functions (optional)

Logging of internal ECU parameters via CCP/XCP:

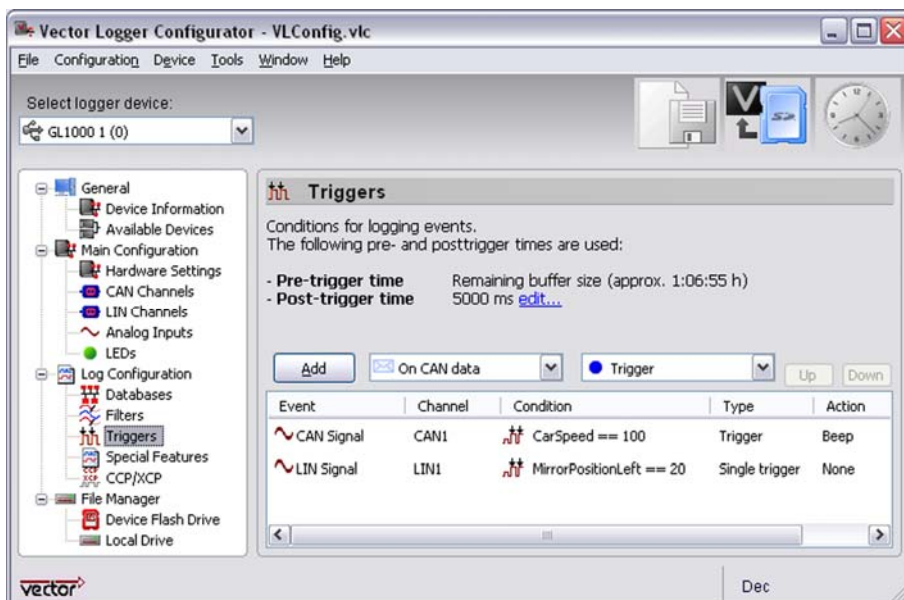
- > Support of CCP 2.1 and XCP 1.x
- > Cyclic time-synchronous measurement via DAQ lists
- > Signal selection and parameterization of CCP measurement directly in configuration tool (CANape must be installed on PC)
- > Configuration of CCP/XCP measurement in CANape
- > Seed&Key support for protected ECUs, generation of Seed&Key algorithms with CANape V7.0 and higher

Special functions

- > 4 analog inputs
- > 2 digital inputs/outputs, e.g. for external triggers
- > Loudspeaker for signaling, e.g. trigger conditions
- > CCP/XCP on CAN with Seed&Key

Technical data

CAN channels	2 user configurable CAN channels
CAN interfaces	Piggyback boards: High-speed: 80C251, TJA1050, TJA1041, Low-speed: TJA1054, Single wire: TLE6255G, Truck & Trailer
LIN channels	2 independent LIN channels with TJA1020
Memory	SD memory cards up to 2 GB SDHC memory cards up to 32 GB
PC interface	USB 2.0 High-speed (USB 1.1 compatible)
Logger capacity 2 GB	approx. 100 million CAN messages (at DLC 8)
Export of data	CANalyzer/CANoe/CANape/CANgraph (ASCII, binary, MDF), MS Excel
Output	4 user-configurable LEDs Loudspeaker for signal tones
Control inputs, control outputs	4 analog inputs (0 V to 16 V, sampling rate max. 1 kHz, 10 bit resolution, 1 % accuracy) 2 digital inputs/outputs (0 V to 36 V)
Bus errors	Logging of CAN Error Frames, Remote Frames and LIN bus errors
Real-time clock	Date and time
Start time	150 ms at 2 GB Xmore SD memory card
Supply voltage	5,8 V to 30 V
Current consumption	Sleep mode: typ. 160 µA Operating: typ. 55 mA at 12 V
Temperature range	-40 °C to +85 °C (depending on SD card) -20 °C to +80 °C (only GL1010)
Dimensions	approx. 107 × 85 × 35 mm (GL1000) approx. 130 × 85 × 35 mm (GL1010)
IP degree	IP65 according to ISO 20653 (only GL1010)



Graphical configuration tool
Example: Trigger settings