

The image shows the Kvaser Hybrid Pro 2xCAN/LIN interface. It is a black, rectangular device with a textured surface. A USB cable is connected to the left side, and two other cables are connected to the bottom. The device has several labels: "PWR", "CH 1", "CH 2", "INFO 1", and "INFO 2" on the right side, and a serial number label "S/N:001001" near the bottom. The background is dark and slightly blurred.

## KVASER HYBRID PRO 2XCAN/LIN

EAN 73-30130-01042-0

Kvaser Hybrid Pro 2xCAN/LIN is a flexible, dual-channel interface that allows each channel to be assigned independently as CAN, CAN FD or LIN. This makes the Kvaser Hybrid Pro 2xCAN/LIN a must-have “universal interface” for every engineer involved in automotive communications!

The Kvaser Hybrid Pro 2xCAN/LIN offers advanced features such as support for CAN FD, Silent Mode, Single Shot, Error Frame Generation and Kvaser MagiSync automatic clock synchronization. As a Pro-level device, this interface can host user-developed programs, created using resources provided within Kvaser’s free CANlib SDK. These can be designed to accomplish a range of advanced tasks, such as CAN node simulation and CAN flashing, or create a LIN to CAN gateway. Guidance and code examples are provided.

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## Major Features

- Hybrid USB CAN/LIN two-channel interface with two separate 9-pin D-SUBs.
- t programs allow users to customise the Hybrid Pro 2xCAN/LIN's behaviour.
- Supports high-speed CAN (ISO 11898-2) up to 1Mbit/s and LIN 2.2A (ISO 17987 Part 1-7) up to 20 kbit/s.
- Supports CAN FD (ISO 11898-1) up to 5 Mbit/s (with correct physical layer implementation).
- Capable of sending up to 20000 messages per second, per CAN channel, time-stamped with a 1 microsecond accuracy.
- USB-powered (bus V+ reference required for LIN).
- Kvaser MagiSync – automatic time synchronization between MagiSync-enabled Kvaser interfaces connected to the same PC.
- Galvanically isolated CAN channels.
- Single-shot function ensures that failed transmissions will not retry.
- Error frame generation and error counters.
- LED lights indicate device status.
- Fully compatible with J1939, CANopen, NMEA 2000 and DeviceNet.
- Supplied with Kvaser CANlib and Kvaser LINlib, free software APIs that are common to all Kvaser hardware and enable the channels to be configured intuitively and fast.
- Extended operating temperature range from -40°C to 85°C.



## Technical Data

CAN/LIN Channels	2 (Individually configurable as CAN or LIN)
CAN Transceivers	1051T/E (Compliant with ISO 11898-2)
CAN Bit Rate	50 kbit/s to 1 Mbit/s
CAN FD Bit Rate	Up to 5 Mbit/s (with proper physical layer)
CAN/LIN Controller	Kvaser CAN/LIN IP in FPGA
LIN Transceivers	TJA1021T/20
LIN Bit Rate	1 - 20 kbit/s
Time Stamp Resolution	1 µs
CAN Max Message Rate	20,000 msg/s per channel
Error Frame Detection	Yes
Error Frame Generation	Yes
Silent Mode	Yes
Kvaser MagiSync	Yes
PC Interface	USB 2.0
Power Consumption	max 280mA
Hardware Configuration	Done by software (Plug & Play)
Software Requirements	Windows 7 or later. (For other operating systems, contact Kvaser support.)
Dimensions	50 x 170 x 20mm for body incl. strain relief
Weight	170 g
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	0% to 85% (non-condensing)

### WARRANTY

2-Year Warranty. See our General Conditions and Policies for details. Register your product at [www.kvaser.com/getting-started](http://www.kvaser.com/getting-started) for an additional 1-year warranty extension.

### SUPPORT

Free technical support on all products available by contacting [support@kvaser.com](mailto:support@kvaser.com).

### SOFTWARE

Documentation, Kvaser CANlib SDK and drivers can be downloaded for free at [www.kvaser.com/downloads](http://www.kvaser.com/downloads).

Kvaser CANlib SDK is a free resource that includes everything you need to develop software for the Kvaser

CAN and LIN interfaces. Includes full documentation and many program samples, written in C, C++, C#, Delphi, Visual Basic, Python, as well as Kvaser's t Programming language.

All Kvaser CAN interface boards share the common software API, CANLib SDK. Programs written for one interface type will run without modifications on the other interface types.

J2534 Application Programming Interface available.

RP1210A Application Programming Interface available.

HTML-Help and online documentation in Windows and Linux.