# **USBcanll HS/LS**

## CAN Bus USB Interface for Vehicle Electronics

CAN communication interfaces are an inexpensive alternative to diagnostic interfaces. The USBcanll HS/LS from KVASER is a powerful hardware interface to be used for simple communication tasks in Engineering and Development.



#### **CAN API**

The programming interface from KVASER-Interfaces provides powerful communication mechanisms for CAN applications. Local buffering and preprocessing on the VCI result in high performance and a reduction of time-critical tasks for the PC.

#### **D-PDU API**

The standardized programming interface provides applications with powerful multichannel communication mechanisms with vehicle protocols, such as Diagnostics on CAN (ISO 15765) and UDS (ISO 14229). It also allows integration into diagnostic systems in accordance with ISO 22900 (MVCI). D-PDU API is also available as an option.

#### **Scalability**

If your application requires more than one CAN bus at any time, the number of communication channels available at the PC can quickly be extended. This is simple to organize by combining the existing CAN interface with further CAN or EDIC® interfaces from Softing.

## **Flexibility**

Combining USBcanll HS/LS with appropriate API software enables compact solutions for all kinds of communication applications. The KVASER programming interface thus supports reliable CAN communication on Layer2 in a simple way. The optional D-PDU API software makes communication channels with higher diagnostic protocols available to applications via the standardized API and thus relieves the application of standard tasks.



#### **AREAS OF APPLICATION**

- Simple communication tasks
- Simulation
- Test/validation
- Applications in Development and Engineering

#### **ADVANTAGES**

- Active interface with its own microcontroller
- 2 separate CAN channels with CAN high-speed and CAN lowspeed
- Easy to use
- Lightweight and smart housing
- Inexpensive solution

## **Technical Data**

| Format              | Approx. 46 x 115 x 22 mm   |
|---------------------|--|
| Power supply        | 5V via USB interface, alternatively 9 – 30V via CAN bus connector                    |
| Current consumption | Typ. 130 mA via USB, alternatively approx. 850mW with power supply via CAN           |
| Microcontroller     | 16-bit microcontroller   |
| PC interface        | USB, Full Speed (12 Mbit/s), pluggable USB cable (type B jack)                       |
| Vehicle interfaces  | 2 x CAN 2.0B with 11-/29-bit identifier, D-Sub 9 connector in acc. with CiA standard |
|                     | - CAN high-speed transceiver in acc. with ISO 11898                                  |
|                     | - CAN low-speed transceiver (TJA1054)  |
|                     | Not galvanically isolated from PC interface  |
| Status display      | LED for power supply status  |
|                     | LED for CAN1 and CAN2 status   |
|                     | LED for error status   |
| USB cable           | Approx. 50 cm with standard USB connector type A                                     |
| CAN cable           | Approx. 30 cm with D-Sub 9 connector   |
| Temperature range   | -40 +85 °C   |
| EMC conformity      | Noise emission: EN 55022 Class B   |
|                     | Interference immunity: EN 61000-6-2 (industrial environment)                         |
|                     | FCC part 15 subpart B limit A (industrial environment)                               |
| Software interface  | CAN Layer2 API from Kvaser (not 100% compatible to Softing CAN L2 API)               |
| Delivery scope      | USBcanll HS/LS hardware  |
|                     | Quick Start Instruction  |
|                     | CD with CAN-API software and documentation   |
| System requirements | Operating system: Windows 7, Vista, XP   |

### **Order Numbers**

| USBcanll-HSLS | USBcanll HS/LS hardware with 2 x D-Sub connector |
|---------------|--|
|               |  |

## **Supplementary Products and Services**

| KAB08-DSUB9-J1992 | Connecting cable to OBD connector (SAE J1962 / ISO 15031-3), cable length approx. 2 m |
|-------------------|---|
| PDUAPI-EC         | Upgrade D-PDU API software for EDIC and CAN hardware from Softing on data carrier     |