Leaf Light HS v2
CAN Bus USB Interface for Vehicle Electronics

CAN communication interfaces are an inexpensive alternative to diagnostic interfaces. The Leaf Light HS from KVASER is a powerful hardware interface to be used for simple communication tasks. With the new product variant Leaf Pro HS it is possible to communicate with CAN FD as well as with Classic CAN.

## Areas of Application
- Simple communication tasks
- Communication with Classic CAN or CAN FD
- Applications in the After-Sales Service environment

## Advantages
- Active interface with its own microcontroller
- Easy to use
- Lightweight and smart housing
- Inexpensive solution

### 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 multi-channel 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 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 Leaf Light HS v2 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.
## Technical Data

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Format</strong></td>
<td>Approx. 25 x 100 x 20 mm</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>5V (via USB interface)</td>
</tr>
<tr>
<td><strong>Current consumption</strong></td>
<td>Typ. 70 mA</td>
</tr>
<tr>
<td><strong>Microcontroller</strong></td>
<td>16-bit microcontroller</td>
</tr>
<tr>
<td><strong>PC interface</strong></td>
<td>USB, Full Speed (12 Mbit/s)</td>
</tr>
<tr>
<td><strong>Vehicle interface</strong></td>
<td>1 x CAN 2.0B with 11-/29-bit identifier, D-Sub 9 connector in acc. with CiA standard</td>
</tr>
<tr>
<td></td>
<td>Galvanically isolated from PC interface</td>
</tr>
<tr>
<td></td>
<td>CAN transceiver for CAN high-speed (in acc. with ISO 11898-2)</td>
</tr>
<tr>
<td></td>
<td>Support of CAN FD and Classic CAN with Leaf-Pro-HS-v2 and Leaf-Pro-HS-OBD-v2</td>
</tr>
<tr>
<td><strong>Status display</strong></td>
<td>LED for power supply status</td>
</tr>
<tr>
<td></td>
<td>LED for CAN status</td>
</tr>
<tr>
<td><strong>USB cable</strong></td>
<td>Approx. 110 cm with standard USB type A connector</td>
</tr>
<tr>
<td><strong>CAN cable</strong></td>
<td>Approx. 30 cm with D-Sub 9 connector</td>
</tr>
<tr>
<td><strong>Temperature range</strong></td>
<td>-20 ... +75 °C</td>
</tr>
<tr>
<td><strong>EMC conformity</strong></td>
<td>Noise emission: EN 55022 Class B</td>
</tr>
<tr>
<td></td>
<td>Interference immunity: EN 61000-6-2 (industrial environment)</td>
</tr>
<tr>
<td></td>
<td>FCC part 15 subpart B limit A (industrial environment)</td>
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<tr>
<td><strong>Software interface</strong></td>
<td>CAN Layer2 API from Kvaser (not 100% compatible to Softing CAN L2 API)</td>
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<tr>
<td></td>
<td>D-PDU API software license (ISO 22900-2), for use together with DTS or OTX products</td>
</tr>
<tr>
<td><strong>System requirements</strong></td>
<td>Operating system: Windows 7 / 8 / 10</td>
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<td></td>
<td>For diagnostic applications see data sheet D-PDU API</td>
</tr>
</tbody>
</table>

## Order Numbers

| **Leaf-Light-HS-v2** | CAN USB interface with 1x CAN high speed channel (ISO 11898) at D-SUB9 connector; incl. fixed USB cable and CAN layer 2 API |
| **Leaf-Light-HS-OBD-v2** | CAN USB interface with 1x CAN high speed channel (ISO 11898) at diagnostic connector (SAE J1962 / ISO 15031-3); incl. fixed USB cable and CAN layer 2 API |
| **Leaf-Pro-HS-v2** | CAN USB interface for CAN FD with 1x CAN high speed channel (ISO 11898) at D-SUB9 connector; incl. fixed USB cable and CAN layer 2 API |
| **Leaf-Pro-HS-OBD-v2** | CAN USB interface for CAN FD with 1x CAN high speed channel (ISO 11898) at D-SUB9 connector; incl. fixed USB cable and CAN layer 2 API |

## Supplementary Products and Services

| **CAN-TERM-120** | CAN bus termination resistor 120 Ohm                                                      |