# CAN-LIN Gateway

## Quick start guide

V 2




We make energy mobile.

**LEAB Automotive GmbH**
Thorshammer 6
24866 Busdorf
Tel: +49(0) 4621 9 78 60-0
Fax: +49 (0) 4621 9 78 60-260
info@leab.eu

## Safety

This Quick Start Guide is intended to support safe handling of the CAN-LIN Gateway.

**The CAN-LIN Gateway allows the LPS II to be integrated into the Mercedes-Benz Advanced Control (MBAC) and therefore the most important data of the LPS II to be shown in the MBUX multimedia display, on additional displays in the motorhome body or the MBAC app.**

**In addition to the information on current and voltage for solar, on-board network and external feed, the charging status of the LPS II is also shown on the original vehicle display, along with how to switch the 230 V inverter of the LPS II on and off.**

Observe the safety instructions:

⚠ **WARNING!** Risk of injury from electric shock. Disconnect the vehicle negative cable prior to Installation.

⚠ **WARNING!** Fire hazard due to short circuit: Secure your vehicle with an additional fuse installed near the unit.

**NOTE!** Penetrating water can damage the unit: Prevent water from entering the housing during cleaning.

**NOTE!** The unit is designed for interior use only. Do not mount the unit outside the vehicle.

**NOTE!** Installation must only be carried out by qualified electricians.

## Package contents

| No. | Name |
|---|---|
| 1x | CAN-LIN Gateway |
| 1x | Quick start guide |

## Accessories (optional)

| CAN-LIN Gateway connection cable to LPS II | |
|---|---|
| Part number | 1601001136 |
| Cable length: | 5 m |
| Connections: | open cable end on M12 connector |

## Technical specifications

| | CAN-LIN Gateway |
|---|---|
| Part number | 3001002027 |
| Voltage range | 9.8 V ... 14.6 V DC: |
| Temperature range | -20 °C … +75 °C |
| Power consumption | 18 mA |
| Housing | 7-pin relay socket housing |
| BUS system connections | CAN bus/LIN bus |
| IP rating | IP20 |
| Protection class | III |
| Weight | 30 g |
| Dimensions (L x W x H) | 60 mm x 30 mm x 30 mm |

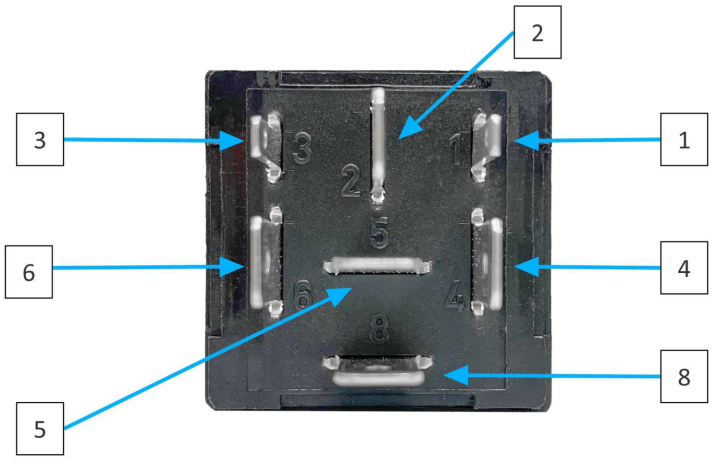
## LIN bus parameters

The following commands and information can be transmitted or controlled via the LIN bus system:

| Information | Command |
|---|---|
| 230 V AC input current | Switch 230 V on/off |
| 12 V DC input current | |
| 12 V DC output current | |
| Solar power | |
| Solar voltage | |
| Battery temperature | |
| Battery power | |
| SoC (state of charge) | |
| Output power in % | |

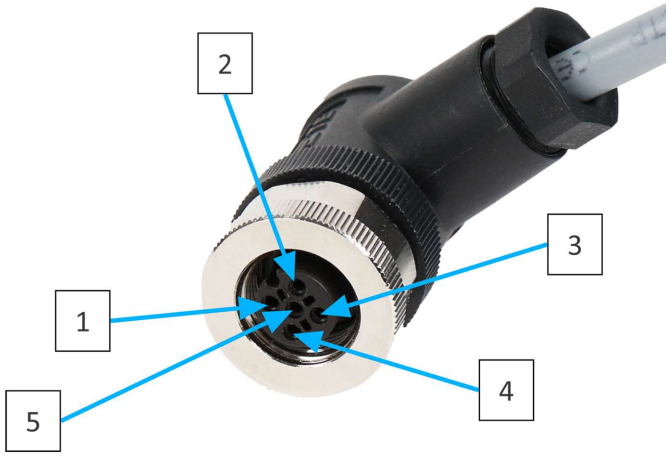
## PIN assignment

### CAN-LIN Gateway




| Pin | Assignment | Description |
|---|---|---|
| 1 | Terminal 31 | Ground (earth) |
| 2 | CAN (High) | CAN-Bus High |
| 3 | LIN | LIN bus |
| 4 | Terminal 31 | Ground |
| 5 | CAN (Low) | CAN-Bus Low |
| 6 | n. a. | Not assigned |
| 8 | Terminal 30 | 12 V DC: |

## M12 connector of the connection cable (accessories)




| PIN | Assignment | Description | Core colour |
|---|---|---|---|
| 1 | Not assigned | | |
| 2 | Battery positive | 12 V DC: | Black |
| 3 | GND | Ground | Brown |
| 4 | CAN (High) | CAN-Bus High | Blue |
| 5 | CAN (Low) | CAN-Bus Low | Grey |

## Installation

⚠ **WARNING!** Risk of injury from electric shock. Disconnect the vehicle negative cable prior to Installation.

To install the unit, proceed as follows:

**NOTE!** To ensure the smooth operation of the CAN-LIN Gateway, make sure that the Gateway and the LPS II are at the same ground potential (GND).

1. Connect pin 2 (CAN (High)) to CAN (High) of the LPS II.
2. Connect pin 5 (CAN (Low)) to CAN (Low) of the LPS II.
3. Connect pin 3 (LIN) to the LIN connection point of the MBAC (Mercedes-Benz Advanced Control).
4. Connect pin 8 (12 V DC) to the 12 V connection point of your vehicle or the LPS II.
5. Connect pin 1 or pin 4 (GND) to the ground of your vehicle or the LPS II.

⇨ The unit is installed.

## Disposal

Dispose of the device in accordance with the Waste Electrical and Electronic Equipment Regulations (WEEE).

The system must not be disposed of with household waste. Take it to a recycling point or return it to your point of sale.