

# LIN to CAN/RS232 Gateway



The **LIN to CAN** and **LIN to RS-232 Gateways** can be used to interface a LIN bus to CAN or RS-232 respectively. The converters can act as both LIN Master and Slave. A typical use-case is to control or monitor a LIN bus from a PLC with RS-232 port over the gateway device, or simply to bridge a LIN network to a CAN bus.

Both LIN-CAN and LIN-RS232 are available in the following firmware options:

- **Universal gateway**  
The communication protocol allows to fully control the LIN bus. The user can transmit and receive LIN frames (more details below)
- **Configurable CAN-LIN Gateway (LIN-CAN device only)**  
The user configures the mapping between CAN and LIN (CAN id to LIN id), CAN and LIN channel parameters, LIN scheduler, and stores the configuration into an internal non-volatile memory.  
The gateway automatically forwards data from given received CAN Id to LIN bus and vice versa. This options comes with a free-of-charge PC application for configuration.
- **Without firmware**  
The firmware is developed according to customer needs or the customer can develop the firmware it by himself.

## Universal Gateway Firmware

The universal gateway firmware for both LIN-CAN and LIN-RS232 devices provides the user a full control of the LIN bus communication. With the help of the communication protocol for RS-232 and CAN bus, the user can configure the gateway and communicate with the LIN bus. The device can act as LIN Master, LIN Slave, or LIN sniffer. The user can transmit and receive LIN frames, or simply monitor LIN bus communication.

The universal firmware enables to act as:

- LIN Master
- LIN Slave
- LIN Monitor (communication sniffer)

The communication protocol allows to:

- Configure the LIN channel (Master/Slave, Baud Rate, Checksum type)
- Transmit: Master Request, Master Responses
- Receive: Slave Responses
- Simulate Slave
- Sniffer: receive all LIN communication

#### **Technical Specification**

- LIN to RS-232 and LIN to CAN Gateway/Converter
- Both LIN-RS232 and LIN-CAN available with universal firmware for easy integration
- Supports LIN v1.x a v2.x
- Supports LIN Master/Slave
- LIN Master's 1 kOhm pull-up resistor can be enabled by software
- 2x DSUB-9 (1x LIN, 1x CAN or RS-232 respectively)
- Power 9-30 VDC
- 4x LED (3x status, 1x power)
- Reset switch
- Microchip dsPIC33
- Dimensions 108 x 54 x 30 mm
- Can be placed on table or mounted on a DIN rail (a clip needed)
- Firmware upgradable via CAN or RS-232
- Firmware customizable on request