

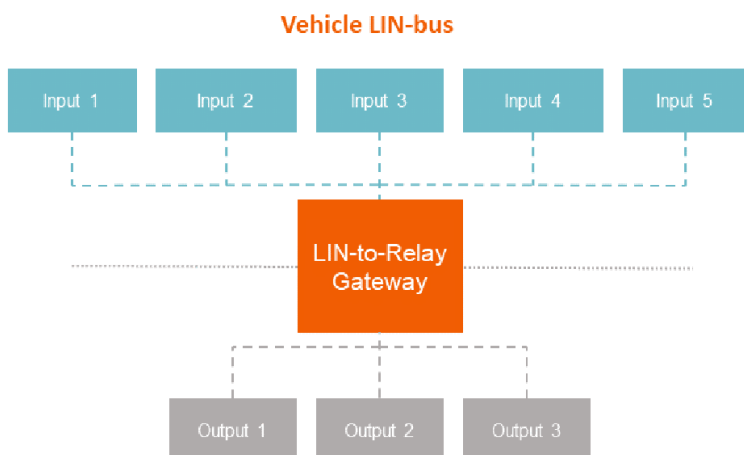
# LIN to Relay Gateway

The LIN to Relay Gateway, developed by Sioux Technologies answers the need in the market to connect in-vehicle LIN networks directly to outputs.

Nowadays we see an increase of Electronic Control Units whom exchange information over the Local Interconnect Network in modern vehicles whom still need to control the vehicle in conventional way.

With its specific design the LIN to Relay Gateway is able to integrate and connect any operating LIN devices into an analogue/digital signal to its connected components such as light modules.

At your convenience Sioux can configure the gateway to match your specific needs and application.



## Knowledge and expertise

Sioux is specialized in developing and integrating software and hardware applications in the automotive industry. With our expert knowledge, Sioux is the technical partner of leading companies in the market. Also specific products like the Tachograph Replacement Unit and a Door Control Unit, help us to support our clients.

## Connections

- LIN (slave)

## Features

- Free configurable / programmable
- Operating voltage: 8 - 32 V
- Protection class: IP67
- EMC certified
- Green/Red LED indicator
- MOLEX MX150 Series connector
- Load dump / reverse polarity protection
- LIN baud rate 5 - 20Kbit/s

# Technical Specifications

## Specifications

Product name	LIN-to-Relay Gateway
Sioux part number	1000439

## System

CPU	Infineon 96 Mhz
RAM	1.7 KBytes

## LIN bus characteristics

Baud rates	5 - 20Kbit/s @ 40 meter bus length
Data frame	Variable length of 1 to 8
LIN bus connections	16 x Slave

## Power supply

Operating supply voltage range	8 - 32 V DC
Power consumption (standby)	< 0.2 mA at 24 V
Power consumption (operating)	< 75 mA at 24 V
Load dump protection	120 V / 400ms

## Software

Gating message configuration	Gate only specific messages from one LIN bus to another. Gate all messages from one LIN bus to relay, except a specific block list (limited number of gated messages).
Manipulated message configuration	Specific messages can be recognized and modified. Data can be copied from different messages into one or more proprietary message. Data can be limited or modified. It is possible to gate between different standards, identifiers can be modified.
Message frequency	The message repetition rate can be modified.
Message priority	If more than one message is used to compare or modify data into a proprietary message, the selection from incoming messages can be selected on message-priority level.

## Hardware characteristics

Environmental protection class	IP67
Operating temperature range	-30 to +70 °C
Storage temperature range	-40 to +85 °C
EMC specification	<ul style="list-style-type: none"> <li>• Pre-compliant with Automotive directive 2004/104/EC:</li> <li>• Radiated and conducted emission</li> <li>• Radiated and conducted immunity</li> <li>• Up to 200 V/m</li> </ul>
Connector	MOLEX MX150L Series, Part Nr. 19418-0026
Contacts	MOLEX MX150L Series, Part Nr. 19420-0001, (1.5 – 2.5 mm <sup>2</sup> )
Dimensions	117 x 55 x 48 mm (L x W x H)
Material	Polystyrene (STYRON 485) enclosure filled with epoxy resin

## Relay characteristics

Voltage (max)	200 V DC
Initial contact	0.150 Ω
Operating Temperature	-40 to +85 °C
Storage Temperature	-40 to +105 °C

## Pinning

1	KL15 (Ignition)	7	OUT-2
2	KL30 (Battery)	8	OUT-3
3	KL31 (GND)	9	GND
4	LIN	10	ISP-RxD
5	OUT-1	11	ISP-TxD
6	LIN-GND	12	ISP-Prog

