LIN to CAN/RS-232 Gateway
Data Sheet

1. Overview

The **LIN to CAN/RS-232 Gateway** can be used to interface LIN bus to CAN or RS-232. It can act as both LIN Master or 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.

The gateway is available in two variants - **LIN-RS232 and LIN-CAN**.
LIN-RS232 comes with a preflashed firmware which allows the user to configure and control the gateway via a simple binary protocol over RS-232.
The gateway can act as:

- LIN Master
- LIN Slave
- LIN bus Monitor (receives all LIN communication and forwards into onto the RS-232)

The gateway can be controlled by a binary protocol over RS-232. This allows the user to:

- Configure LIN channel (Master/Slave, Baud Rate)
- Transmit and Receive LIN frames
- Acts as an observer - all LIN communication is forwarded onto RS-232

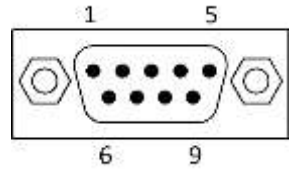
Both **LIN-RS232 and LIN-CAN** firmware is customizable on request and can be flashed into the device via CAN bus or RS-232 respectively. Source code examples (LIN, RS-232, CAN, Timer) can be provided on request so that the user can develop his own application based on the device.

2. Technical Specification

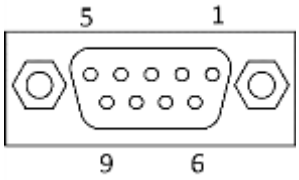
Electrical and Mechanical	
Power	9 - 30 V DC (polarity protection) via LIN D-SUB9 connector
Consumption	80mA @ 12 V
LEDs	3x Status Indicator 1x Power
Button	1x Tactile switch (reset factory defaults)
Connectors	LIN: D-SUB9M RS232: D-SUB9F
Dimensions (L x W x H)	108 x 54 x 30 mm
Weight	80 g
Operating Temperature	-20 to 60 °C
Protection	IP40
Placement	Table (adhesive pads included) DIN-rail mount (clip sold separately)
General	
Device Variants	LIN to CAN LIN to RS-232
Firmware	Customizable on request Upgradable from PC via RS-232 or CAN bus
Microcontroller	Microchip dsPIC33EV
Communication	
LIN bus	Supports LIN v1.x and v2.x Supports both Master and Slave Master 1 kOhm pull-up resistor can be enabled programmably
RS-232 variant	All parameters configurable: Baud Rate, Stop Bits, Parity
CAN variant	All parameters configurable: Baud Rate, Sample Point, SJW

3. Connector Pin Assignment

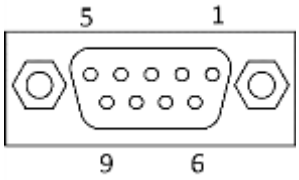
LIN

D SUB 9 Male	Pin	Description
 Front view	1	
	2	
	3	GND
	4	
	5	
	6	
	7	LIN bus
	8	
	9	Vin (Power input)

CAN Variant

D SUB 9 Female	Pin	Description
 Front view	1	
	2	CAN_L
	3	GND
	4	
	5	
	6	
	7	CAN_H
	8	
	9	Vin2 (optional)

RS-232 Variant

D SUB 9 Female	Pin	Description
 Front view	1	
	2	TxD (output)
	3	RxD (input)
	4	
	5	GND
	6	
	7	
	8	
	9	

4. Ordering Information

P/N	Product
LIN-RS232-GW	LIN to RS-232 Gateway with universal firwmware

LIN-RS232	LIN to RS-232 Gateway (without firmware – to be developed by customer)
LIN-CAN	LIN to CAN bus Gateway

5. Photos


LIN to RS-232
Gateway
MACH SYSTEMS
RS-232


LIN
POWER
LIN TX
LIN RX
RS-232
LIN to RS-232
Gateway
MACH SYSTEMS
RS-232

6. Contact

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