

## **ASiKS-Engineering**

### **User Manual**

## LIN-RS232 opt. Module

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This document provides detailed information about ASiKS-Engineering's LIN-RS232 opt. Module.

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#### 1 Introduction

The LIN-RS232 opt. Module shown in Figure 1 is used for easily connecting a LIN Bus to the serial Port (RS232) of e.g. a PC.

As it is passive module, no baud rate conversion or LIN Bus specific signal generation is done the module.



Figure 1: LIN-RS232 opt. Module

This interface provides the following features:

- 9-pin D-SUB plug (male) to connect to the LIN Bus
- 9-pin D-SUB plug (female) to connect to the serial port of e.g. a PC
- As the module implements galvanic separation, it needs to be powered on both sides
- Dimensions: 63mm x 34mm x 17mm
- Optimised to be used with LIN-EASYSTARTER (LinMon software, downloadable at <a href="https://www.asiks-engineering.com/downloads\_eng.html">https://www.asiks-engineering.com/downloads\_eng.html</a>)

#### 2 Connectors and pinning description

#### 2.1 LIN connector D-SUB 09 plug (male)

Table 1 shows the pinning, functional description and electrical characteristics of the LIN connector of ASiK-Engineering's LIN-RS232 opt. Module.

Pin	Symbol	Description	Min	Тур	Max	Unit
3	GND	Ground	0	0	0	V
7	LIN*	LIN bus line input/output	-27		+40	V
9	VBat	battery supply	5	12	18	V

Table 1: Quick reference data – LIN D-SUB 09 male

Note \*: Master configuration (1k PullUp), slave configuration on

#### 2.2 RS232 Connector D-SUB 09 plug (female)

Table 2 shows the pinning, functional description and electrical characteristics of the RS232 connector of ASiKS-Engineering's LIN-RS232 opt. Module.

Pin	Symbol	Description	Min	Тур	Max	Unit
5	GND	Ground	0	0	0	٧
4	DTR*	Supply voltage input 1	5	12	18	V
7	RTS*	Supply voltage input 2	5	12	18	V
2	RXD**	Receive data output				
3	TXD**	Transmit data input		·		

Table 2: Quick reference data - RS232 D-SUB 09 female





Note \*: The interface can be driven on RS232 side using a straight 1:1 cable and setting DTR and RTS signals to high voltage level, which usually is represented by a logical "1" on software side. However it depends on the host's RS232 transceiver and the used cable length.

# Hence it is recommended to use a separate power supply to directly supply the interface on the PC side

Note \*\*: The electrical characteristics of the RS232 Standard apply.

#### 3 Disclaimer

For damage of any kind, arising by the employment of the LIN-RS232 opt. Module, no requirements can be made valid opposite the supplier!

#### 4 Contact Information

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#### Appendix A – Revision History

Revision History 1.0 Initial Release 23<sup>rd</sup> March, 2015 2.0 User manual rework 15<sup>th</sup> January 2019