

## Datasheet

### ADA-4010A

#### Addressable RS-485/RS-422 to RS-232 Baud Rate Converter



## APPLICATION

ADA-4010A addressable converter is device solving the problem of connecting no addressable devices equipped with the RS232 interface to multi-point RS485 bus by adding the address to RS232 device. At the same time converter turns RS485/422 standard to RS232 standard with possibility of interference with the format of transmitted data. It can be set baud rate, number of data bites, control parity and number of stop bits depend on configuration. The setting can be different for RS232 port and RS485/422 port.

It is not required for operating, power supply form RS232 port, converter supports asynchronous baud rate up to 230,4 kbps through one or two pairs of twisted cable of RS485/422 interface. ADA-4010A is equipped with screw terminal block for connection of RS232, RS485/422 and power supply. Converter uses RX, TX, GND signals and RTS signal of RS232 is used for data flow control type: RTS-ON, RTS-TOGGLE, RTS-OFF and CTS signal is not use, DTR signal is connected with DSR. Other signals are not connected. If is not needed looping above signals, can be not connect DTR to the terminal block.

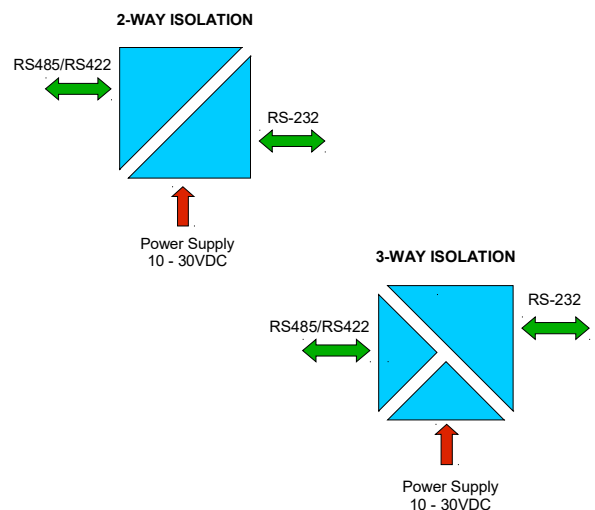
Surge protection on each RS485/422 lines, has been made on the base of diode suppressors and fuses.

## TECHNICAL DATA

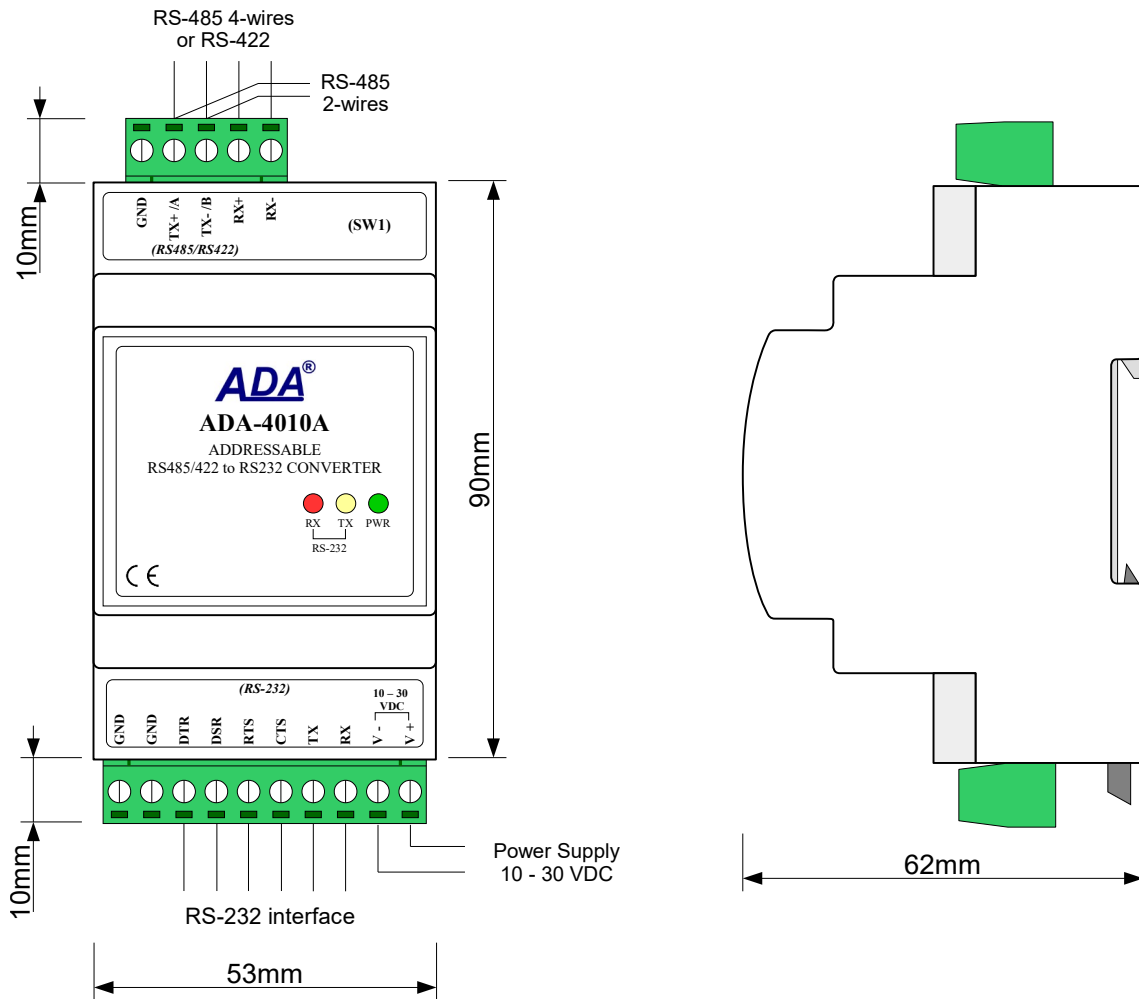
Transmission Parameters		
Interface	RS-232	RS-485/RS-422
Connector	Screw terminal block - max. Ø 2,5mm <sup>2</sup>	Screw terminal block - max. Ø 2,5mm <sup>2</sup>
Max. Line length	up to 15 m	1200 m
Max. number of connected device	1	32
Transmission line	Multi-wire cable 9x0,34 in shield	1-pair or 2-pair twisted cable, UTP Nx2x0,5 (24AWG), shield inside large interferences STP Nx2x0,5 (24AWG)

Standards	EIA-232, CCITT V.24,	EIA-485, CCITT V.11
Max. baud rate	230,4 kbps	
Transmission type	Asynchronous full duplex, half duplex.	
Optical Signalization	<ul style="list-style-type: none"> <li>• PWD – green LED power supply,</li> <li>• RX - red LED data receiving on RS-232 side,</li> <li>• TX - yellow LED data transmission via RS232 interface.</li> </ul>	
<b>Electrical Parameters</b>		
Power requirements	10 - 24 – 30 V DC	
Power Cable	Recommended length of power cable – up to 3m	
Power	<2W	
Protection from reverse power polarization	YES	
Galvanic Isolation	2-way or 3-way on the level 1kV= or 3kV=	
Optoisolation	~3kV - between signal lines RS485/422 and RS-232	
Electromagnetic compatibility	Resistance to disruptions according to the standard PN-EN 55024. Emission of disruptions according to the standard PN-EN 55022.	
Safety requiring	According to the PN-EN60950 norm.	
Environment	Commercial and light industrial.	
<b>Environmental Parameters</b>		
Operating temperature	-30 ÷ 60°C	
Humidity	5 ÷ 95% - non-condensing	
Storage temperature	-40 ÷ 70°C	
<b>Casing</b>		
Dimensions (W x D x H)	53mm x 90mm x 62 mm	
Material	PC/ABS	
Degree of casing protection	IP40	
Degree of terminal protection	IP20	
Weight	0,10 kg	
According to standards	DIN EN50022, DIN EN43880	
Location during work	Free	
Mounting method	On the rail compliant with DIN35 / TS35 standard.	

## GALVANIC ISOLATION



## DIMENSIONS AND CONNECTION



## VERSIONS

ADA-4010A -		
<b>Galvanic isolation:</b>		
1kV=, 2-way		2
1kV=, 3-way		23
3kV=, 2-way		3
3kV=, 3-way		33
<b>Terminals &amp; Terminals Cover:</b>		
Cover without inlets, screw terminal block		1
Cover with inlets, screw terminal block		2
Cover without inlets, plug-in screw terminal block		3

Order example:

Product Symbol: **ADA-4010A-23-3**

**23** – 3-way galvanic isolation 1kV=,

**3** – cover without inlets, plug-in screw terminal block,