

Datasheet

ADA-I9110

USB to RS-232 Converter with galvanic isolation



APPLICATION

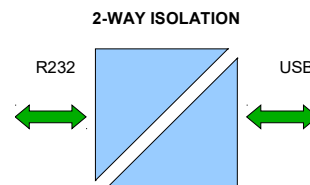
ADA-I9110 converts USB to RS-232 without interfering in the format of transmitted data. Converter uses transmission lines as Rx, Tx, RTS, CTS, DTR, DSR, DCD, RI and GND (ground) to communicate with RS-232 interface devices and it is automatically detected by the computer system after connecting to USB network (Plug&Play device). This converter doesn't require external power supply (it is powered from USB bus) and it uses asynchronism baud rate up to 921,3 kbps. ADA-I9110 has implemented optoisolation in signal channel between USB and RS-232 and 1kV= or 3kV= galvanic isolation in the power circuit. Purchasing the converter you will also receive drivers for Windows 98, ME, NT, 2000, XP, Vista, Linux. Installing this software on Operating System it adds the additional COM port about the next free number, witch can be used as standard COM port. It is virtual COM port therefore some software use DOS can work improperly but it's considerably faster than standard port – baud rate up to 921,6 kbps.

TECHNICAL DATA

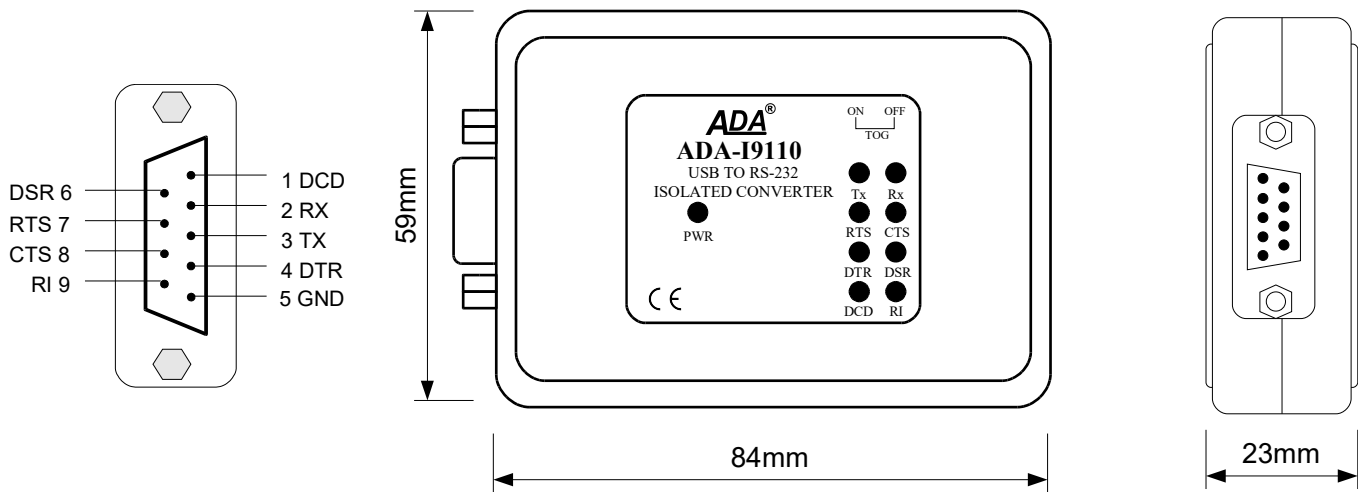
Transmission Parameters		
Interface	USB	RS-232
Connector	USB connector type B	DSUB-9M (mail)
Max. Line length	up to 5m	up to 15 m
Max. number of connected device	1	1
Transmission line	Standard USB extension cable A-A	Cable DB9F/DB9M multi-core 9x0,34 shielded (op to 15m) or twisted cable 9-pairs UTP 9x2x0,5 (24AWG) shield inside large interferences (STP 9x2x0,5 (24AWG)).

Standards	USB1.1, USB2.0	EIA-232, CCITT V.11
Max. baud rate	up to 921,6 kbps (Standard) / up to 1500 kbps (Profibus)	
Transmission type	Asynchronism half duplex or full duplex,	
Optical Signalization	<ul style="list-style-type: none"> • PWD – green LED power supply, • RX – red LED received data, • TX – yellow LED transmitted data, • additional signals: RTS, CTS, DTR, DSR, DCD, RI 	
Electrical Parameters		
Power requirements	from USB of Computer	
Power Cable	USB cable	
Power	< 0,5 W	
Protection from reverse power polarization	Not applicable	
Galvanic Isolation	1kV= or 3kV= between RS232 and USB interfaces	
Optoisolation	2,5 kV= in signal channel between RS232 and USB interfaces	
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.	
Environmental Parameters		
Operating temperature	0 ÷ 50°C	
Humidity	5 ÷ 95% - non-condensing	
Storage temperature	-40 ÷ 70°C	
Casing		
Dimensions (W x D x H)	84 mm x 23 mm x 59 mm.	
Material	Polistyren	
Degree of casing protection	IP20	
Weight	0,05 kg	
Implementation of Standard	Not applicable	
Location during work	Free	
Mounting method	Not applicable	

GALVANIC ISOLATION



DIMENSIONS AND CONNECTION



VERSIONS

Galvanic isolation:	ADA-I9110 -	Order example: Product symbol: ADA-I9110-2
1kV=	1	2 – galvanic isolation 1kV=.
3kV=	2	