

USB - RS422 Communication Adapter – virtual serial port ELO E217



Characteristics

- Easy installation
- Short USB cable – increased resistance against disturbs
- Cygnal chip
- Dust-free housing
- Custom variants and pinouts of RS422 connector

Introduction

The USB interface is preferred to the COM port with RS-232 interface in personal computer technology. To connect the peripheral devices of the RS422 interface, the USB/RS422 adapters along with the driver are applied to create so-called virtual COM on the PC.

ELO E217 is a device which converts virtual COM to the asynchronous line of the symmetric signal via the USB interface. The signals transmission to the duplex RS422 interface allows the range and the transmission interference immunity to increase.

Use of the adapter

The adapter allows a half-duplex device to be connected with RS422 interface to USB device. At that increases a resistance of transfer against the electromagnetic disturbances, too. It is intended to be used in the environments where lightning over-voltage is not necessary to be considered.

The adapter allows the transmission rate up to 1 Mbps. This maximum attainable rate decreases due to the RS422 line length and/or its impedance growth. Recommended maximum line length is 1200 m at the rate of 9600 bps.

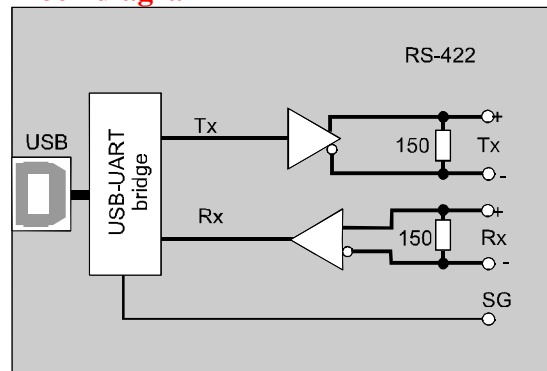
The E217 adapter may be applied on the PC computers under the MS Windows 98/Me/2000/XP, Vista or Linux operating systems.

Operation principles

The adapter converts the RS422 interface to the USB interface, transmits TxD and RxD signals. The RS422 connector is RS45 or DB9 female.

RS422 interface is used to the communication of two devices in duplex mode. As transmission media there are necessary two twisted pairs, each for one transmission direction.

Block diagram



Specification

Parameters

USB interface	USB 2.0 full-speed (12Mb/s)
USB connector	B type
RS422 connector	RJ45 or DB9F
Communication mode	full duplex
Transmission mode	asynchronous, duplex
Maximum data rate	1 Mbps

Other

Power take-off	to 100mA (Low power)
Dimension: Width	25 mm
Length	2300 mm
Height	15 mm
Stocking temperature	- 10° to +55 °C
Working temperature	+ 0° to +50 °C
Humidity	0 – 85% (non-condensing)