

**FO Interface
 USB-RS232 (optical) 1Channel**

USB-RS232 (optical) Converter

1 General _____

The USB to RS232 converter was designed to make serial port expansion quick and simple. Connecting to a USB port on your computer or USB hub, the USB to RS232 converter instantly add serial communication ports to your system. The converter is powered via USB port. Therefore no additionally power supply is necessary.



Pic. 2 USB-RS232 Converter

2 Application _____

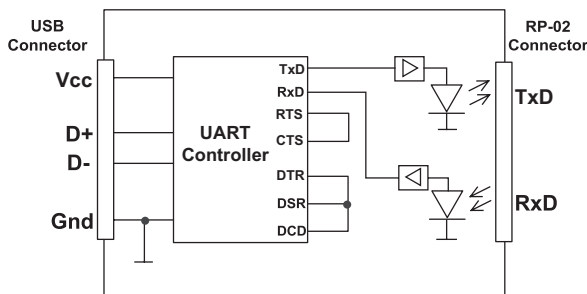
Due to the simple handling and the good data characteristics, the interface can be used in many applications:

- Existing electrical RS232 Systems can be extended interference-free over larger distances
- Interference-free data transmission in EMI-loaded area
- Electrical isolation between RS232 interfaces

3 Ordering Information _____

Model	Part Number
650nm / RP-02	901U6550R2001

4 Block Diagram _____



Pic. 1 Block diagram USB-RS232 Converter

5 Features _____

- 1Channel USB-RS232 Converter
- Full-Duplex Data Transmission
- 921600 Bits/s Data rate
- 'Power-Good' LED
- 'Receive-Data' LED
- USB-A port
- Optical port RP-02
- Plastic case
- Power supply via USB port

6 Supported Systems _____

Windows:
 Windows XP and greater

Linux Kernel 2.6.9 and greater
 (Driver is included in Kernel)

For further information for supported systems please see:

<http://www.ftdichip.com/Drivers/VCP.htm>

7 Software Driver _____

Virtual COM port (VCP) Driver for the FT232R UART Controller:

<http://www.ftdichip.com/Drivers/VCP.htm>



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8 Installation _____

Windows

- Connect the USB-RS232 converter to the interface with an appropriate FO cable
- Connect the USB-RS232 Converter with the USB port
- Check the PWR-LED function (if necessary install the driver with the Hardware) Wizard
- Identify the assigned virtual COM port in the device manager
- Adapt your application to the virtual COM port

Linux starting from Kernel 2.6.9

- Connect the USB-RS232 converter to the interface with an appropriate FO cable
- Connect the USB-RS232 converter with the USB port
- Check the PWR-LED function
- Identify the hardware data with *dmesg* (standard/dev/ttyUSB0)
- Adapt your application to the virtual COM port

9 CE-Declaration of Conformity _____

The USB-RS232 1Channel converter meets the basic requirements according to Article 4 and Appendix III of Directive 89/336/EWG: Electromagnetic Interference (EMI). The modem complies with the followings standards:

- EN 55022 or EN 50081-1
- EN 55024 or EN 50082-1
- EN 50082-2 (Industrial use)

10 Maximum Ratings _____

Power supply _____ 5,5V
 Operating temperature _____ - 25...+70°C
 Storage temperature _____ - 40...+80°C

Stresses beyond those listed under 'Maximum Ratings' may cause permanent damage to the converter. Above listed values are stress limits only and functional operation of the converter at these conditions is not recommended. Exposure to maximum rating conditions for extended periods may affect the converter reliability.

11 Technical Data _____

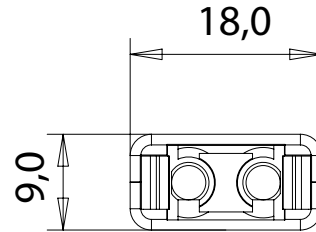
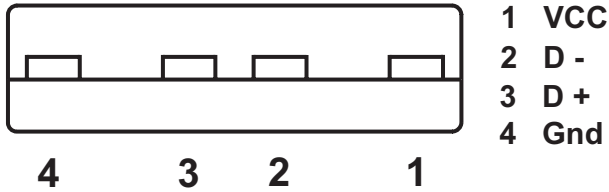
Power supply:	4.75V-5.25V (powered by USB port)
Current cons.:	< 100mA
el. Interface:	USB Device Full Speed
el. Connector:	USB A
opt. Interface:	RS 232
max. opt. Data rate:	921600 Bits/s
UART Interface Support:	7 or 8 data Bits 1 or 2 stop Bits odd, even, mark, space or no parity
opt. Connector:	RP - 02
Wavelength:	650nm
opt. P _{out} :	>100µW in 980/1000µm
opt. P _{in} :	1µW
Dimension:	ca. 64 x 18 x 9mm
Weight:	ca. 10g
UART Controller	FT232R
LED Indicators:	green = Vcc red = RxD (rec. Data)
Protection class:	IP40



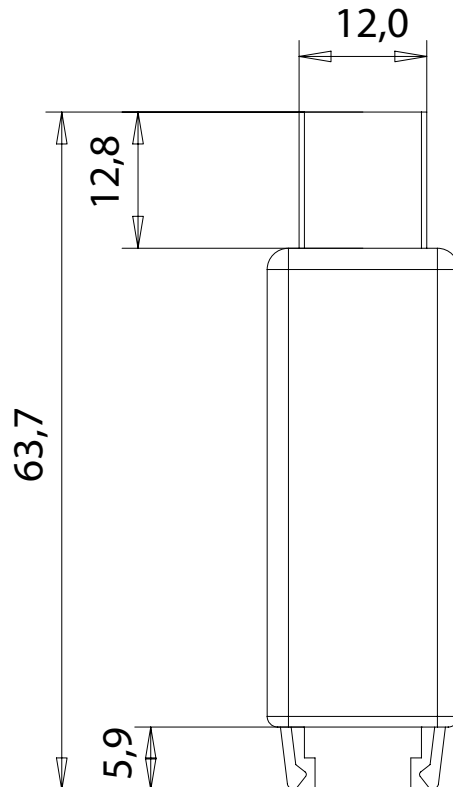
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12 USB Pin Out _____

13 Technical Drawing _____



PIN Nr.	Name	Funktion
1	Vcc	5V DC Input
2	D -	Data In / Out positiv
3	D +	Data In / Out invertiert
4	GnD	Ground



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