

Product sheet: USBSER-3V3  
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## Isolated USB – 3V3 level serial converter with power supply output

The USBSER-3V3 is a 1.000 volt isolated USB to serial converter with 3V3 level serial line and a 3V3 / 50mA power supply for feeding external devices.

It's powered from the USB port and suited for driving optocouplers, or interfacing directly to uarts and microcontroller systems.

### Serial line specs

The receiver threshold is half supply with 200 mV hysteresis, so signals above 1.75 Volt reads '1' while signals below 1.55 reads '0'. The receiver is 5 Volt tolerant.

The transmitter swings from 0 to 3V3 unloaded, and with 100Ohm load (~30mA) it drops 500mVolt (see figure 1).

It's capable of driving 5 Volt TTL inputs, which have 0.8 / 2V4 levels.

The converter can be configured to invert the Rx and Tx signals.

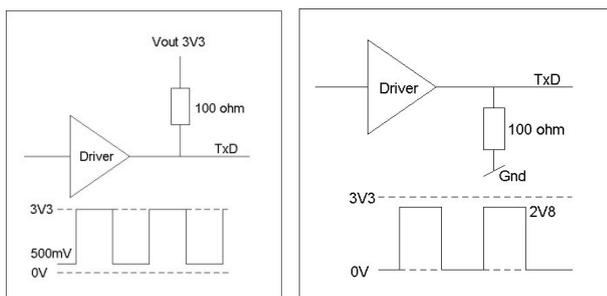


Figure 1

### Power supply out specs

Power from the USB port supplies an isolated DC-DC converter that feeds the drivers and the supply output. The DC-DC converter is capable of delivering 100mA, but since the serial drivers needs their part, the power supply is rated to 50mA.

The power supply is short-circuit protected.

- USB 2.0 full speed device
- Virtual comport drivers
- Win-7, Win Vista and Win XP compatible



### Connections (4 wire terminal block)

- Pin 1 : Vout 3V3 / 50mA supply output
- Pin 2 : TxD
- Pin 3 : RxD
- Pin 4 : Gnd

### Hardware details

- Isolation voltage: 1.000 Vrms / 1 minute
- Power : Powered from the PCs USB port
- Operating temperature : 0 to 70°C
- Visual indicators (Leds) : 2 (Rx and Tx)
- Speed : up to 1Mbps
- Handshake: Null modem configuration
- Buffers: 128 bytes Rx and 256 bytes Tx fifo.

### Mechanical details

- Height : 14mm
- Width : 23mm
- Length : 66mm
- Weight : 15 gr

### Commercial details

- Order : **USB SER-3V3**
- Price(2014) : **EUR 70 @1**  
**EUR 63 @10**  
**EUR 47 @100**