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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 : **USBSER-3V3**

- Price(2013) : **EUR 70** @1
  EUR 63 @10
  EUR 47 @100