

## **®** Operating Instructions

# Micro USB 2.0 to UART-Converter

Order No. 2315244

#### Intended use

This product enables USB connectivity in a device that has a UART interface (USB 1.1 or USB 2.0). The converter can convert TTL level (5V) and 3.3V level interfaces to USB.

The converter board is soldered straight onto a circuit board or by means of a socket header, for example, or contact is made via socket headers (contact spacing 2.54 mm).

This product complies with the legal national and European requirements. All names of companies and products are the trademarks of the respective owners. All rights reserved.

#### Package contents

- · Micro USB 2.0 to UART-Converter
- · Operating instructions

## Latest operating instructions

Download the latest operating instructions via the link www.conrad.com/ downloads or scan the QR code shown here. Follow the instructions on the



## Symbols explained



An exclamation mark in a triangle indicates important instructions in these operating instructions which absolutely have to be observed.



The arrow symbol indicates specific tips and advice on operation.

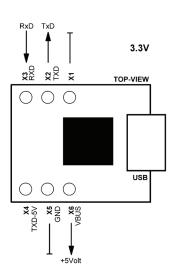
#### Safety Instructions

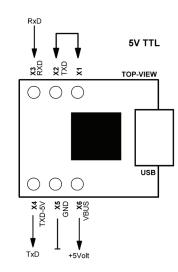


Please read the operating instructions carefully and pay particular attention to the safety instructions. The warranty will be void in the event of damage caused by failure to observe these safety instructions! We do not assume any liability for any resulting damage!

We shall not accept liability for damage to property or personal injury caused by incorrect handling or non-compliance with the safety instructions. The warranty/guarantee will be void in such cases.

- The unauthorized conversion and/or modification of the product is not allowed for safety reasons.
- · This product is not a toy and should be kept out of the reach of children.
- The product must not get damp or wet. Only for operation in dry rooms.
- Do not carelessly leave the packaging material lying around. It may become a dangerous plaything for children!





#### Pin allocation

put (if not used, connect to GND!)
ΓL
oower output +5Volt/ 100mA

#### Software installation



First install the driver software!

Only then should you connect the converter with the USB port.

A Silicon Labs chip (CP 2102) is built into this board. The latest "USB to UART Bridge VCP / Virtual COM Port" drivers are available on the manufacturer's homepage: https://www.silabs.com.

## 3.3V and 5V level

3.3V level (TXD) is available at Pin X2. If you have a TTL level (5V) application, connect pin X2 to pin X1. You can then tap the TTL level at pin X4 (TXD\_5V).



If the TTL driver is not used, you should connect pin X1 to GND!



The RXD pin X3 can only process signals between 3V and 5V. This is independent of the TXD driver wiring!

When connecting a USB connection cable, make sure that the cable connections are established correctly. In case of voltage reversal, not only the converter is destroyed but also the corresponding USB port. Loss of warranty/guarantee!

### **Disposal**



Electronic devices are recyclable and do not belong in the household waste. Dispose of an unserviceable product in accordance with the relevant statutory regulations.

That way you fulfil your statutory obligations and contribute to the protection of the environment.

### Technical data

Supply voltage: .....+5 V/DC via USB Power consumption depending on baud rate:..... max. approx. 100 mA TTL-TxD level: ..... Between 4.5 V and USB-Vcc USB port: ..... Micro USB Permissible ambient temperature: ..... 0°C to +60°C Permissible relative ambient air humidity: ...... 20 to 80 %, not condensing **Dimensions:** ..... approx. 20 x 12 x 12 mm

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