

# Tools

- [FT232RL 3.3V 5V FTDI USB To TTL Serial Adapter Module](#)

# FT232RL 3.3V 5V FTDI USB To TTL Serial Adapter Module

The USB to TTL serial adapter is based on the high quality and very popular FTDI FT232RL chipset and is an excellent way to connect TTL serial devices to a PC through a USB port.

Works perfectly with the Arduino Pro mini boards and ESP8266 boards

Ideas for many uses, including:

- Programming microprocessors such as ARM, AVR, etc
- Working with computing hardware such as routers and switches
- Serial communication with many devices such as GPS devices
- Serial terminals on devices like the Raspberry Pi

This adapter supports both 5V AND 3.3V operation! Simply set the jumper as required to choose between 5V and 3.3V as labelled on the board.

The adapter comes with a right-angle connector fitted allowing you to use it straight away. If you need to access any of the other inputs or outputs of the FT232RL, all the useful signals are provided as through-hole solder pads – ideal for use with straight headers into a breadboard, for example.

The main connector has 6 pins:

[ft232rl-pin-out-diagram.png](#)

- DTR: Data Terminal Ready – an output used for flow control
- RX: Serial data Receive pin
- TX: Serial data Transmit pin
- VCC: Positive voltage output – this is controlled by the jumper. If the jumper is set to 5V, this will provide a 5V output. If the jumper is set to 3.3V, this will provide a 3.3V output.
- CTS: Clear To Send – an input used for flow control
- GND: Ground or 0V

For most uses, you can simply connect the following pins:

- RX on this board to the TX pin on your device
- TX on this board to the RX pin on your device
- GND on this board to GND on your device

## FEATURES

- Support 3.3V, 5V
- Chipset FT232RL
- USB power has over current protection, using 500MA self-restore fuse
- RXD/TXD transceiver communication indicator
- Pin definition: DTR,RXD,TX,VCC,CTS,GND
- Pitch:2.54mm
- Module size: 3.60cm x 1.85cm (L x W)

## Shop

[AliExpress](#)