

## Arduino Ethernet WITHOUT PoE + USB2Serial converter

The Arduino Ethernet is a microcontroller board based on the Arduino Uno, and incorporating a WizNet W5100 TCP/IP Embedded Ethernet Controller. It can be programmed like an Uno via a six-pin FTDI -style serial connector. The Arduino USB-to-Serial adapter or any FTDI-style USB-to-serial connector can be used to program it.

A separate power-over-Ethernet (PoE) module can be soldered to the board to provide power from a conventional twisted pair Category 5 Ethernet cable. It is IEEE802.3af compliant, and works with all compliant PoE injectors currently available.

The USB2Serial Board converts a USB connection into 5 volt TX and RX that you can connect straight to the Arduino Mini or other microcontrollers, allowing them to talk to the computer. It features the Atmega8U2 programmed as a USB-to-serial converter, the same chip found on the Arduino Uno. The USB Serial connector has an ISCP interface, allowing you to reprogram the chip when placed in DFU mode. The pinouts on the connector are compatible with a standard FTDI header ( as well as the Adafruit and Sparkfun USB-Serial adapters).

