UART TTL to Ethernet Converter, Easy-to-use, High-speed, Low-power, High-stability, Upgradable

Overview

The **UART TO ETH** module provides an easy way to communicate between UART and Ethernet, it can be configured via web page.

Features

- M0 series 32-bit ARM processor, fast speed, high efficiency
- 10/100M Auto-MDI/MDIX ethernet interface, regardless of cross-over or straight-through cable
- Auto-reconnecting, provides a reliable TCP connection
- Supports time-out reboot (no-data reboot), configurable reboot time
- Flexible serial port data framing, allows kinds of customized packeting
- Baudrate configurable, from 600bps up to 460800bps, supports five parity check options: None, Odd, Even, Mark, Space
- Supports customized heartbeat packets, make sure the connection is truthful
- Supports customized registration packets, detect the connection status, customizable packet header, make the register packets with selected MAC address
- Supports customized web page, allows user to customize the module configuration page
- Supports RFC2217-like protocol, be able to communicate with devices whose serial setting (baudrate, data bit, etc.) may change
- Supports DNS domain name resolution, configurable DNS server
- Supports DHCP, auto-obtained IP or static IP
- Firmware is upgradable via the network
- Restore to factory settings via software and/or hardware
- Comes with default MAC address, which is customizable
- Available working modes: TCP Server, TCP Client, UDP Server, UDP Client, HTTPD Client
- Supported protocols: IP, TCP, UDP, ARP, ICMP, DHCP, DNS, HTTPD Client
- Configurable via web page, AT commands, serial protocol, and network protocol, provides configuration protocol which can be integrated to your own software
- Provided software: module configuration software, TCP/UDP testing tool, VCOM virtual serial port software
- Example code: host computer (socket), VB, C++, Delphi, Android, iOS, etc.

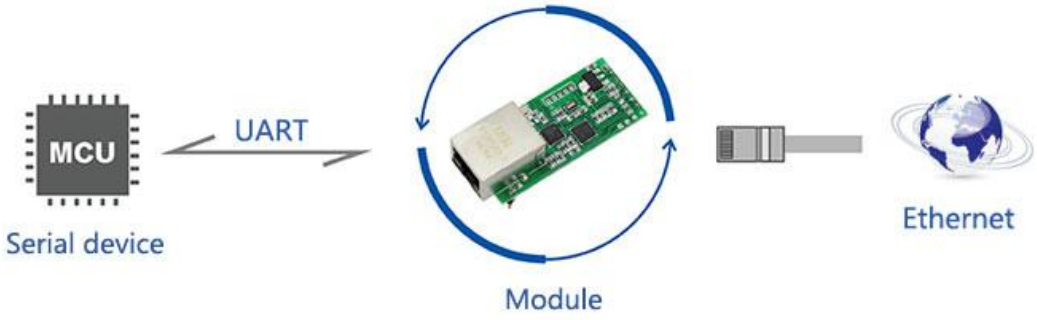
Specification

- Protection: built-in 1.5KV electromagnetic isolation
- Interface: 3.3V TTL (2.54mm pitch pinheader)

- Power supply: 3.3V DC or 5V DC (via different pin)
- Operating current: 150mA (avg)/160mA (max)
- Operating temperature: -25~75°C
- Power consumption: <1W
- Storage condition: -40~105°C, 5~95%RH
- Dimension: 50.5 x 22.6 x 15 (mm)

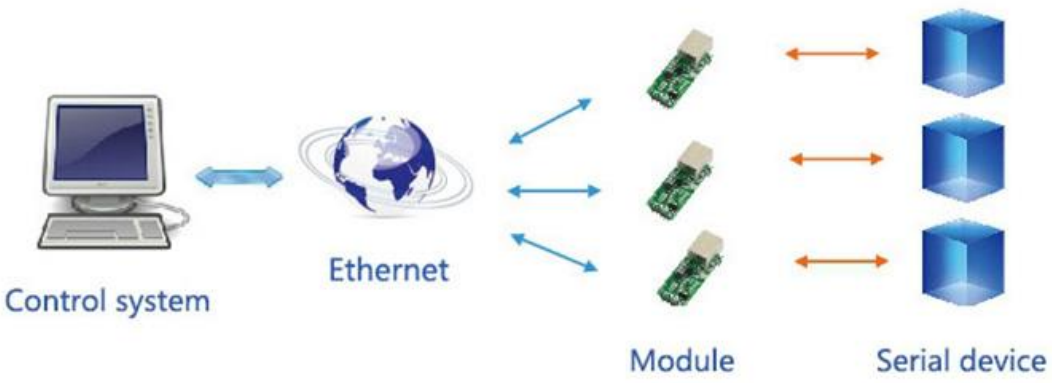
Application

Bi-direction transparent transmission between TTL and wired Ethernet:

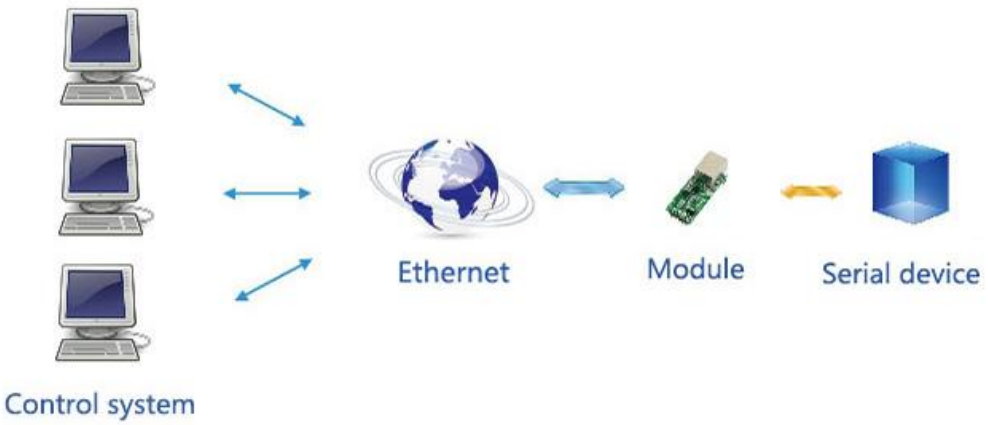


Extend the communication distance for serial devices:

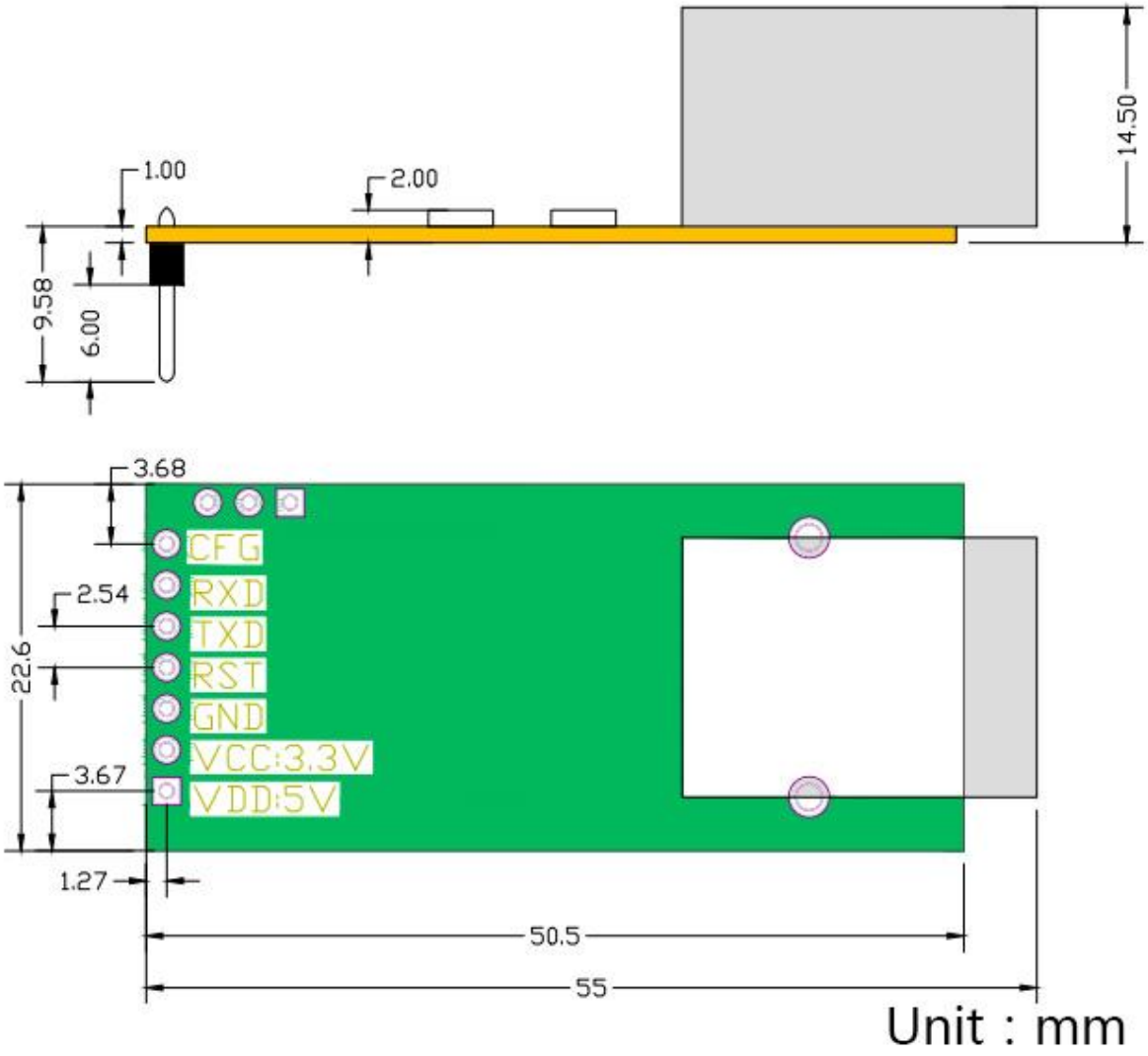
Manage multi serial client devices remotely via one web server:



Manage serial server remotely via multi web clients:



Dimensions



Development Resources

Wiki : www.waveshare.com/wiki/UART_TO_ETH