



USR-TCP232-E2 Datasheet

Dual UART to Ethernet module

Build a Smarter IOT world, Your Trustworthy Partner

USR-TCP232-E2 is a dual serial UART to Ethernet TCP/IP module. It adopts Cortex-M7 solution, which has a main frequency up to 400MHz, powerful performance, fast transmission speed, and high reliability. Equipped with a deeply optimized TCP/IP stack, built in hardware and software watchdog and a variety of keepalive mechanisms, USR-TCP232-E2 keeps online all the time. It supports TCP Client, TCP Server, UDP Client, UDP Server and HTTPD Client working modes, achieves data transparent transmission via simple configuration.

✧ New Solution

New ARM core, Cortex-M7 solution, equipped with deeply optimized TCP/IP protocol stack. It has low latency and strong scalability, stable and reliable.

✧ Modbus Gateway

It supports Modbus TCP and Modbus RTU protocol mutual conversion, multi-host polling function.

✧ Dual Sockets

Each serial port supports connecting to two different servers at the same time. Two sockets are mutually backed up, providing higher reliability and better flexibility.

Features

- ARM Core, industrial grade temperature range, optimized TCP/IP protocol stack, stable and reliable.
- 10/100Mbps Ethernet port, auto-MDI/MDIX.
- Supports TCP Client, TCP Server, UDP Client, UDP Server and HTTPD Client mode.
- Supports configuring parameters via built-in webpage, supports custom webpage.
- Supports upgrading firmware via built-in webpage and configuration software, more convenient.
- Supports dual UART interfaces, which can work independently.
- Supports RTS/CTS hardware flow control and Xon/Xoff software flow control.
- Supports Virtual COM Port Driver (USR-VCOM).
- Supports hardware reset via the "Reload" button.
- Supports static IP and DHCP, supports scan the devices via UDP broadcast protocol.
- Supports keepalive mechanism to quickly detect the dead connections and reconnect.
- Supports username and password for web login, more secure.
- Supports websocket for bidirectional data transmission between a maximum of 16 websocket clients and any serial port.
- Supports serial and network AT commands.

	RS-485 Pull-up and Pull-down Resistor	2.2K Ω
Software Parameters	Network Protocol	IP/TCP/UDP/DHCP/DNS/HTTP/ARP/ICMP
	IP Mode	Static IP, DHCP
	Modbus TCP	Support
	Websocket	Support
	HTTP Client	Support
	UDP Broadcast	Support
	User Configuring	Setup utility, webpage, AT commands
	Serial Packets Cache	Dynamic packet cache. For example: When the packet length is 10 byte, the serial port can cache 450 packets(4.5KB). When the packet length is 1460 bytes, the serial port can cache 10 packets(14.6KB).
Ethernet Packets Cache	48Kbyte	

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