

Model ATC-1000 TCP/IP to RS232/422/485 转换器 用户手册



1.0 产品介绍

ATC-1000 低成本高性能的以太网串口转换器. 组成包括 8051CPU,64KB OTP ROM, 32K bytes SRAM, 10/100Mbps 以太网和串口支持握手信号 RTS, CTS. ATC-1000可控制的1xRS232/422/485设备几乎可处于任何地方 (通过Ethernet或者Internet), 在网络中自动搜寻设备. 配置方式包括, 串口,Telnet,WEB网页,SNMP, 驱动和RAW模式之间自动转换, 支持TCP/IP, UDP, DHCP.

2.0 特点:

- ◆ 支持 RS-232/422/485 接口, 波特率 300~230.4Kbps, 10/100Mbps 以太网
- ◆ 支持 4 线 2 线 RS-485, 并带有接线端子
- ◆ 支持工业标准的 24V 电源输入
- ◆ 接线端子配件便于 RS-422/485 串口接线
- ◆ 支持通过 MAC 地址配置 IP
- ◆ 支持保存和复制配置参数
- ◆ 支持驱动, TCP 服务器/客户端, UDP 服务器/客户端, 一对一, 一对多操作模式
- ◆ 功能强大, 简单易用的配置软件
- ◆ 通过 CE, RoHS 认证

3.0. 硬件安装&初始化设置

3.1 RS-232 Pinout: DB9 Male)

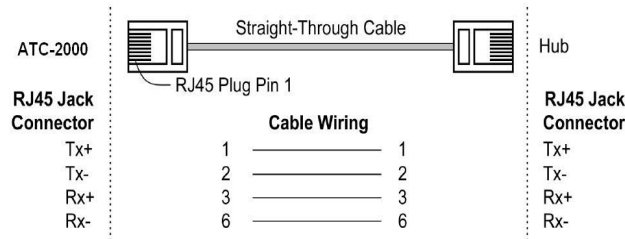
(DB9Male)	Signal	I/O
PIN2	RXD	IN
PIN3	TXD	OUT
PIN5	GND	-
PIN7	RTS	OUT
PIN8	CTS	IN

3.2 RS-422/485 Pinout: (六位接线端子 左起)

Terminal No	1	2	3	4	5	6
RS-422	T+	T-	R+	R-	VIN	GND
RS-485	485+	485-	-	-	VIN	GND

3.3 连接10/100M以太网:

ATC-1000 10/100/M 端口通过通讯线连接转换器或者集线器



3.4电源供电:

ATC-1000 TCP/IP 转换器可由产品配备的 9V 电源适配器供电也可由其他的设备或电源够点.

(+9-->24V@500-100mA)

3.5 ATC-1000 LED 指示灯

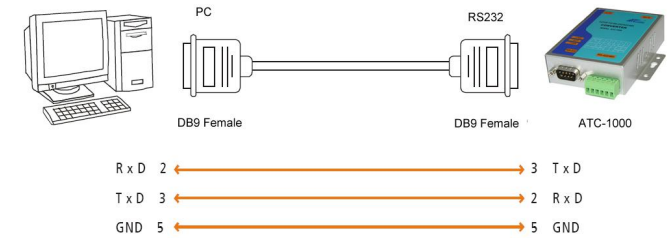
LINK ——指示以太网连接, 绿灯表示以太网连接已建立。

ACT —— 串口与以太网之间有数据传输

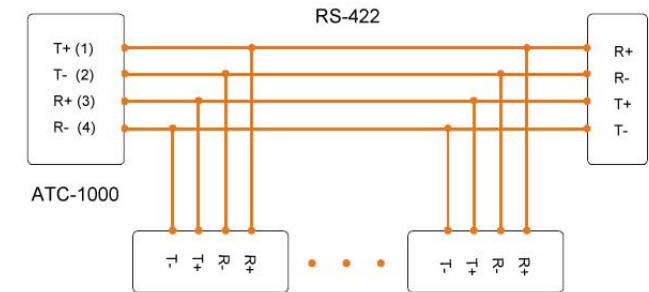
PWR ——电源指示

3.6 连接图示

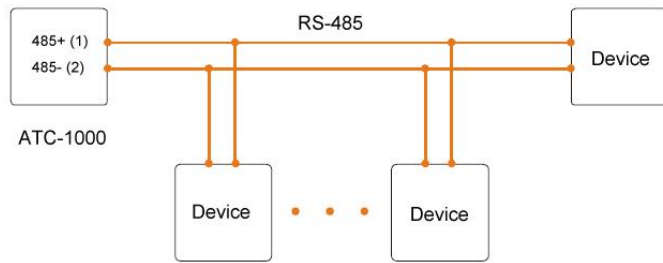
RS-232 连接



RS-422 连接



RS-485 连接



4.0 配置与操作

通过电脑分配静态IP地址在192.168.2.2 ~ 192.168.2.254 范围内子网掩码为 255.255.255.0. 在使用前有必要确认电脑是否可连接ATC-1000. 用户电脑必须已安装网卡以及TCP/IP. 电脑操作系统应是Windows 98/2000/XP或是更新版本的操作系统。

步骤 1 打开网页浏览器并在地址栏输入<http://192.168.2.1> , 这个地址是ATC-1000的出厂默认IP地址, 点击“Enter”.

步骤 2 “ID and Password required” 提示框会出现. 在ID栏输入“admin” (默认用户名), 在password栏输入“system” (默认密码)。点击“OK”. 将会出现配置页面。

The screenshot shows a web browser window with the title 'USER LOG IN'. The page has a blue header. Below the header, there is a 'Site:' label followed by the text '192.168.2.1'. Underneath are two input fields: 'ID:' containing the text 'admin' and 'Password:' containing '*****'. At the bottom of the form is a button labeled 'OK'.

用户登录

默认 ID : admin

默认 Password: system

4.1 选项菜单如下列所示：

Administrator:

[Authentication](#)

[System IP](#)

[System Status](#)

[Load default setting](#)

Functions:

[TCP Mode](#)

[UDP Mode](#)

[UART](#)

[ADC](#)

[DIDO](#)

[Reset Device](#)

下列为菜单功能解释:

4.2 Administrator Setup

相关设置页面的管理者信息.

4.3 Authentication Configuration

用户可在此修改用户名和密码以防止非法登入修改设置。

登录 ID 和密码验证, 长度最长为 15 字符或数字。.

用户名ID: 默认 admin

密码: 默认 system

Authentication Configuration

Setting	Value
Username	<input type="text" value="admin"/> max:15
Password	<input type="password" value="*****"/> max:15
Confirm	<input type="password" value="*****"/>
<input type="button" value="Update"/>	

4.4 IP 地址配置

The ATC-1000 支持3种IP连接类型: Static IP, DHCP., 可在WEB配置中看到。

System IP Configuration

Setting	Value
IP Address	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="2"/> . <input type="text" value="1"/>
Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Gateway	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="2"/> . <input type="text" value="254"/>
DNS	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="2"/> . <input type="text" value="253"/>
IP Configure	<input checked="" type="radio"/> Static <input type="radio"/> DHCP
<input type="button" value="Update"/>	

Static (or Fixed) IP

IP Address: 默认 [192.168.2.1](#)

Subnet mask: 默认 [255.255.255.0](#)

Gateway: 默认 [192.168.2.254](#)

Primary DNS: 默认 [192.168.2.253](#)

如果通过静态或固定IP来连接网络, 执行以下步骤

Step 1: 输入 IP address

Step 2: 输入 Subnet mask

Step 3: 输入 Gateway IP address

Step 4: 输入 Primary DNS IP address

Step 5: 点击 “Update” 。

4.6 DHCP

主机名 (可修改): 默认 **NETUART**, 最大长度为**15** 字符。

If there is a DHCP Server existing in your network environment or you subscribe a CABLE service from your ISP, you can set IP configuration to DHCP to get a dynamic IP address. The **Host Name** is an *optional* item, depending on your DHCP Server setting.

5.0 System Status

This screen shows the ATC-1000's current status. All of the information provided is read-only.

Kernel Version: the installed version of the kernel.

MAC Address: At present the device MAC Address

Nickname: the product model name of NetUART

System Status

MAC Address	00:00:11:33:FF:00
Nickname	NetUART <input type="button" value="Update"/>
System Version	V3.0.060110

5.1 Load default setting

Allow Users to reset the ATC-1000 to return the initial value, but the MAC Address will not be updated.

5.2 Telnet

Telnet connection setting:

Telnet **Load Default Setting to EEPROM** device is to the Telnet Server or Client.

If the Server, show this connection have to wait for the other side of the Port, if the Client, show that external connections to the Port

Remote Server IP Address: When the Client, to be connected the other side of the server IP Address.

5.3 Operation mode

The ATC-1000 support four operation mode: TCP Server, TCP Client, UDP Server and UDP Client. These modes are listed in the Web page for the Operation Mode setting. Each setup screen and available features will differ depending on what kind of operation mode you select. Default is TCP Server.

5.4 TCP Server

Port Number: default **23**, range **0** to **65535**

If your device is acted as passive to accept commands from remote and the data be guaranteed to be received by peer is your concern, then you can set ATC-1000 as TCP Server. Be sure the value of item **Port Number** is same as your remote control application using.

Client mode inactive timeout (minutes): default **20** (0=Disable)

If you want to keep the connection between ATC-1000 and your remote control application always on, then set the value of item **Client mode inactive timeout (minutes)** to 0, otherwise, when the inactive time of no any traffic on line reach the setting value, ATC-1000 will terminate this connection.

5.5 TCP Client

Remote Connection Port Number: default **23**, range **0** to **65535**

Remote Host IP Address: default **210.200.181.102**

If your device is acted as active to report real-time status to remote and the data be guaranteed to be received by peer is your concern, then you can set ATC-1000 as TCP Client. Be sure the value of item **Remote Connection**

Port Number is same as your remote control application using and set the correct value of **Remote Host IP Address**.

5.6 UDP Server

Local Port Number: default **21**, range **0** to **65535**

If your device is acted as passive to accept commands from remote and the data be guaranteed to be received by peer is *not* your concern, then you can set ATC-1000 as UDP Server. Be sure the value of item **Local Port Number** is same as your remote control application using.

5.7 UDP Client

Remote Connection Port Number: default **21**, range **0** to **65535**

Remote Host IP Address: default 192.168.2.2

If your device is acted as active to report real-time status to remote and the data be guaranteed to be received by peer is *not* your concern, then you can set ATC-1000 as TCP Client. Be sure the value of item **Remote Connection Port Number** is same as your remote control application using and set the correct value of **Remote Host IP Address**.

Telnet Control

Item	Value
Telnet Server/Client	<input checked="" type="radio"/> Server <input type="radio"/> Client
Port Number	<input type="text" value="23"/>
Remote Server IP Address	<input type="text" value="210"/> <input type="text" value="200"/> <input type="text" value="181"/> <input type="text" value="102"/>
<input type="button" value="Update"/>	

6.0 UART Control (RS-232)

The ATC-1000 support three serial types: RS232, RS422 and RS485, The user can reference hardware diagram to directly select RS232, RS422,

RS485, no need select by software.

Baud Rate: default 57600, range 300bps to 230.4Kbps

Character Bits: 5, 6, 7, 8 (default)

Parity Check: None (default), even, odd, space, mark

Stop Bits: 1 (default), 1.5 or 2

Hardware Flow Control: None (default), CTS/RTS (or Hardware)

ATC-1000 Management Setup

This chapter will show you how to manage ATC-2000's access setting as well as configure E-mail alert and firmware upgrade.

Hi-speed UART the relevant setting, it is basically similar as windows

UART Control

Item	Current value	Setting
Baudrate	57600	57600 ▾
Character Bits	8	8 ▾
Parity Type	none	none ▾
Stop Bit	1	1 ▾
Hardware Flow Control	none	none ▾
<input type="button" value="Update"/>		



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