

Quick Start Guide

1-Port Modbus Gateway

MODEL: ATC-3002



1. Check Package Content

- ATC-3002 unit 1Pcs
- ATC-3002 Quick Start Guide 1Pcs
- DC9V Ext power adapter 1Pcs

2. Hardware Installation

- Connect an Ethernet cable to ATC-3002 unit if connecting to a switch or cross-over direct to the PC as Figure 1.

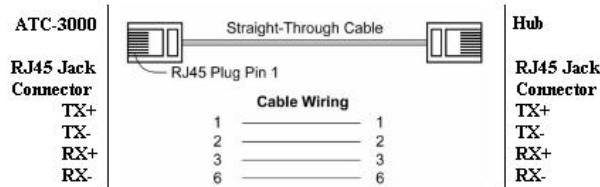


Figure 1

- ATC-3002 10/100 Port t connect to Ethernet card use coss-Through Cable as Figure 2.

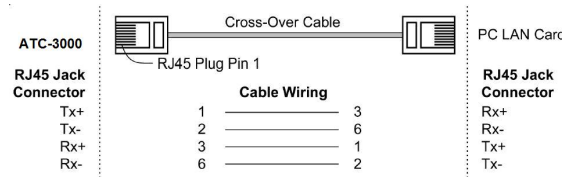


Figure 2

RS-232 Pinout: (DB9 Male)

Terminel No.	1	2	3	4	5	6
RS-422	T+	T-	R+	R-	VCC	GND
RS-485	485+	485-	/	/	VCC	GND

RS-422/485 Pinout: (Six Terminal from left)

(DB9 Male)	Signal	I/O
PIN2	RXD	IN
PIN3	TXD	OUT
PIN5	GND	-

- Connect the power adapter to ATC-3002 and other apply power. Power from other device.(+9--+48V).

3. LED indication

- LINK — Ethernet interface right light, indicating Ethernet is established, the green light is on behalf of the establishment, not bright or bright yellow on the contrary;
- ACT — Ethernet interface left light, blinking between the Ethernet port and RS232 / 422/485 data transmission;
- TXD — Blinks when data is sent by the Ethernet

port to the RS232 / 422/485 serial ports;

RXD — Blinks when data is sent by the RS232 / 422/485 serial port to the Ethernet port;

PWR — Power indicator, red light when the power is turned on.

4. Software Installation

- None

5. Configure the ATC-3002

- Use this section to set up your computer to assign it a static IP address in the [192.168.2.1](#) to [192.168.2.254](#) range with a subnet mask of 255.0.0.0. The default IP address of ATC-3002 is 192.168.2.3, the computer IP user can not set this value, otherwise it will cause IP address conflict.

This is necessary to ensure that your computer can communicate with your ATC-3002. Your computer must have an Ethernet card and TCP/IP installed. TCP/IP should already be installed on computer using Windows 98/2000/XP and later operating systems.

- Open your web browser and type <http://192.168.2.3> in the browser's address box. This address is the factory set IP Address of your ATC-3002. Press "Enter".



Figure 3

The “Username and Password required” prompt box will appear. The default user name and password is null, do not need to fill in, just click OK to enter the page.(Figure 3)

■Set the serial communication parameters and Mosbus protocol
It supports three serial protocols: RS232, RS485, RS422;
Serial communication parameter defaults to 9600,8, N, 1;
Default Modbus protocol Modbus RTU, Modbus Ascii user can change the protocol according to their needs;
Other parameters is recommended to use the default values;
Then Click OK, and then click Apply Settings, modify the previous settings to take effect; when you need to modify the parameters have to click OK and then click Apply Settings, wait a few seconds to complete the modification ATC-3002 after modifying.(Figure 4)

Firmware Version: V3.3.0.1GC
MAC Address: 00-20-4A-EB-D5-AE

Serial Settings

Port Settings

Channel: 1

Interface: RS232

Baud Rate: 9600

Data Bits: 8

Parity: None

Stop Bits: 1

Flow Control Out: Active Always

Delay before Transmit (1):

ms

Hold after Transmit (4):

ms

Flow Control In:

Wait til Active (2): No

Delay after Active (3):

ms

Modem Control Out: Active Always

Modbus

Protocol: ☒ RTU ☐ ASCII

Character Timeout: 50

ms (0=auto)

Tx Delay after Rx: 0

ms

Message Timeout: 5000

ms

OK

Figure 4

■Setting Mosbus connection

http://192.168.2.3/secure/

Firmware Version: V3.3.0.1GC
MAC Address: 00-20-4A-EB-D5-AE

Connection Settings

Connect Protocol

Protocol: Modbus/TCP Server attached to slave(s)

Advanced Server Settings

Modbus/TCP Port: 502

Queue Multiple Modbus/TCP Requests: ☒ Yes ☐ No

Fixed Slave Address: 0

(0=MB/TCP header)

Allow Modbus Broadcast: ☐ Yes ☒ No

Use Bridge Error Codes (0AH0BH): ☒ Yes ☐ No

Swap 4x/0x access to get 3x/1x: ☐ Yes ☒ No

Swap Holding Reg (4x) access to Input Reg (3x) after offset: 0

(0 to disable)

Swap Coil Status (0x) access to Input Status (1x) after offset: 0

(0 to disable)

(Example: read of 401023 maps to 300023 if you enter 1000)

Preset Automated Scan Table (optional)

No.	Unit Id (1-255)	Register Type	Offset	Count (1-124)	Frequency (ms)	
0						Remove
1						Remove
2						Remove
3						Remove
4						Remove
5						Remove
6						Remove
7						Remove
8						Remove

Figure 5

Use ATC-3002 as a slave, Connect protocol in the protocol option to select Default Modbus / TCP Server attached to slave (s).(Figure 5)

Firmware Version: V3.3.0.1GC
MAC Address: 00-20-4A-EB-D5-AE

Connection Settings

Connect Protocol

Protocol: Modbus/TCP Client attached to master

Advanced Client Settings

Modbus/TCP Port: 502

Use Bridge Error Codes (0AH0BH): ☒ Yes ☐ No

Close Idle TCP Sockets after: 10

secs (3-60 secs, 0=disable)

Redundant Entry Retries after: 0

secs (15-60 secs, 0=disable)

Unit ID to IP Address Mapping

No.	Start Id	End Id	Host Address	
1	1	1	192.168.2.5	Remove
2	2	2	192.168.2.6	Remove
3	3	3	192.168.2.7	Remove
4	4	4	192.168.2.7	Remove
5	5	5	192.168.2.7	Remove
6				Remove
7				Remove
8				Remove

Figure 6

ATC-3002 when used as a master, Connect protocol option to select the protocol Modbus / TCP Client attached to master, Modbus / TCP Port default 502, Uint ID to IP Address Mapping set as the slave can enter the user's device IP address and ID number. Then click OK, then Apply Settings wait a few seconds to complete the setting changes.

■Setting RS485、RS422

If the user is using a serial interface RS485 or RS422, will be needed in the Configurable Pins CP2 is set to RS485 Tx Enable, Active level is set to High, and then click OK, Apply Settings wait a few seconds to complete the setting changes.(Figure 7)

Firmware Version: V3.3.0.1GC
MAC Address: 00-20-4A-EB-D5-AE

Configurable Pin Settings

CP	Function	Direction	Active Level
1	General Purpose I/O	<input checked="" type="radio"/> Input <input type="radio"/> Output	<input type="radio"/> Low <input checked="" type="radio"/> High
2	RS485 Tx Enable	<input checked="" type="radio"/> Input <input type="radio"/> Output	<input type="radio"/> Low <input checked="" type="radio"/> High
3	General Purpose I/O	<input checked="" type="radio"/> Input <input type="radio"/> Output	<input type="radio"/> Low <input checked="" type="radio"/> High

OK

Figure 7

Note: After the success of the user to modify the parameters, some browsers still display parameters did before the amendment, refresh the page is still valid, it is recommended to re-login ATC-3002 Web Configuration address 192.168.2.3 user closes the browser (recommended IE browser or 360 browser).