

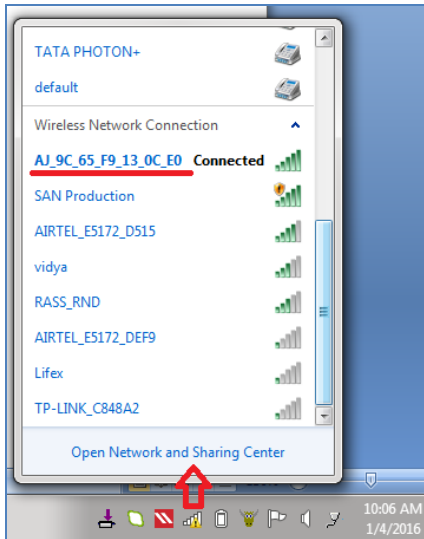
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Connecting. Converting. Leading!

Document Name: User Manual of Modbus RTU/ASCII to TCP on WiFi Gateway, Model SC10WB M

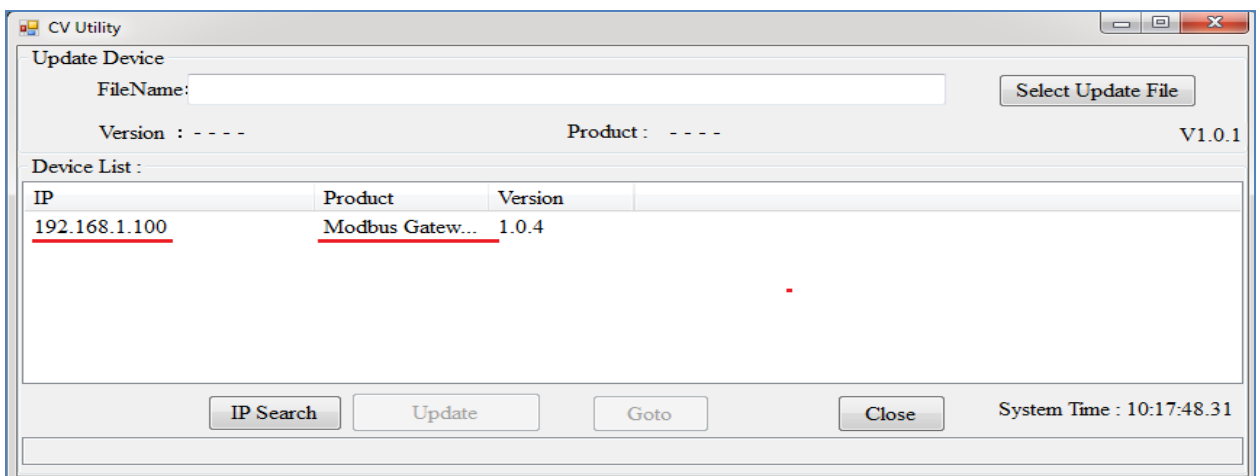
Power on the SC10WB Modbus Gateway Its broadcast SSID is AJ + MAC address.
Please use computer with WIFI adapter to conduct SSID site survey. Looking for a SSID shown as MAC address (ie. AJ: XX: XX: XX: XX: XX: XX) then click connect & password is "12345678"



CV Utility

Install IP Search Utility is provided in CD shipped with the gateway. It can be accessed from "Manual & Utility" folder. (SC10WB M, Manual & Utility)

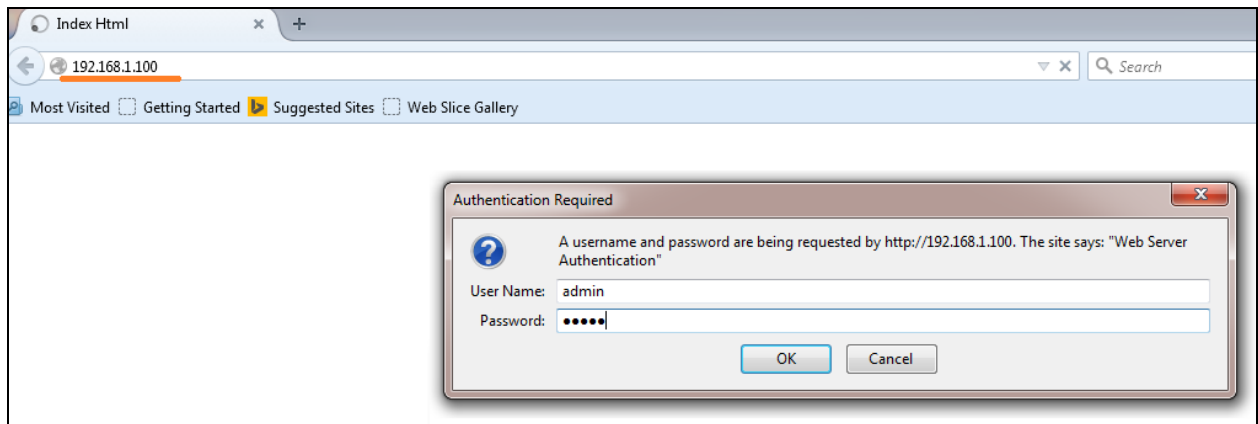
Double click "IP Search" button. SC10EB M gateway IP address is detected on CV Utility. SC10W-BM



Click Goto for open browser

To proceed with the configuration setup, you can also use a web browser (IE or Netscape) to continue the detailed settings

Login page is shown default User name is “admin” and Password is “admin”



System

Enter the old password in the “Admin Password”, enter the new password in the “Password Confirm” and then click on “ Save” to update password.

Auto Reset: If the device has been disconnected or for some reasons the data did not transmit a while, you can soft restart the device after waiting time as your setting.

System	
Admin Password:
Password Confirm:
Auto reset(Hour:s):	0
Device Name :	San WiFi-Module
Description :	Modbus Gateway

Network

Network type: There are two network modes.

1. Soft AP: This is factory default mode. Device acts as an access point to be connected with Computer. support DHCP server function. Devices initial setup should be conducted via “Soft AP” mode.
2. Infrastructure: Through this mode device can be connected to internet via linking to other Access Points.

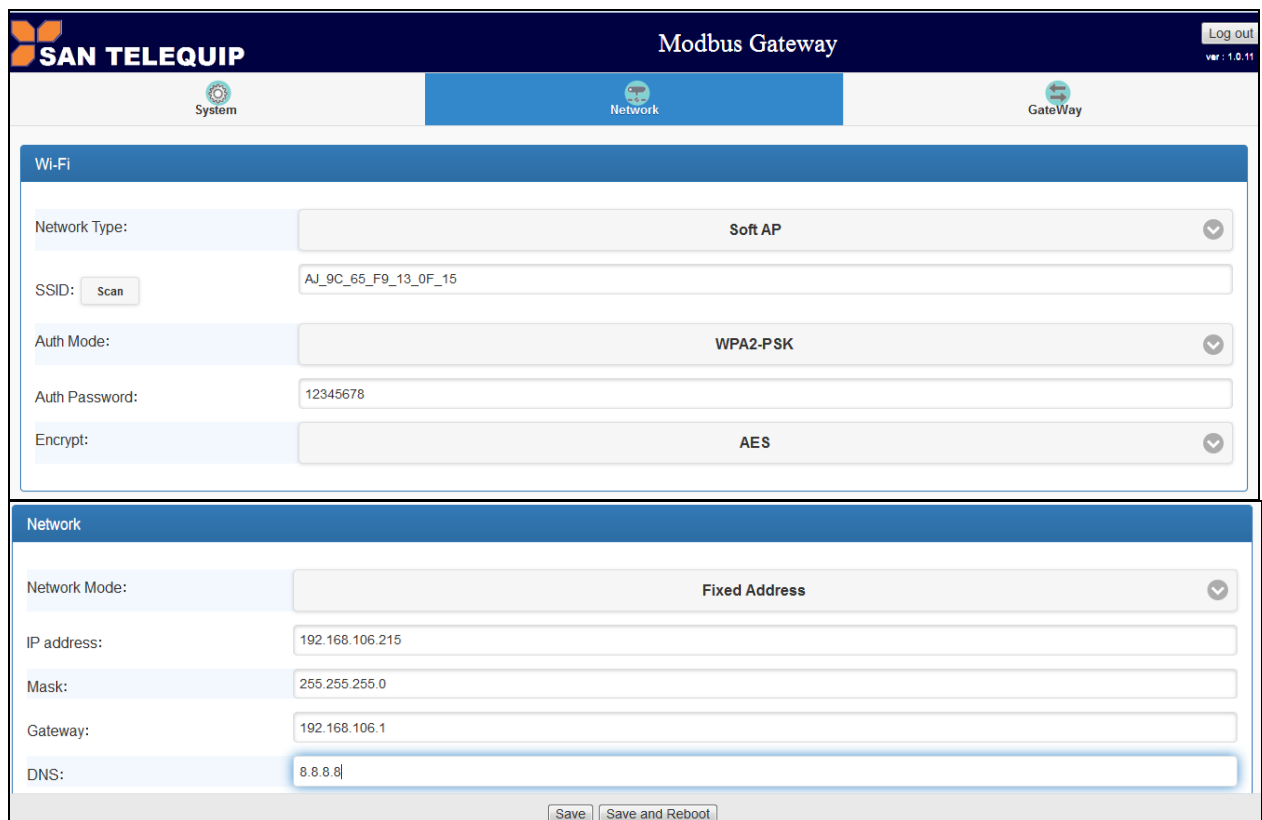
SSID: Click “scan” for existing AP site survey. Choose a suitable SSID, Authentication and Encryption. Then key in the password for AP.

Auth mode: There are four authentication modes. (Open, Shared, WPA-PSK, WPA2-PSK)

Auth Password: Key in password for selected AP.

Encrypt: Choose suitable cipher suite

IP Address: Configure IP Address – Choose “DHCP” let AP assign IP address to Modbus Gateway. You can also choose “Fixed Address” to input fixed IP address, Subnet Mask, Gateway address.



The screenshot displays the configuration interface for a Modbus Gateway. The top navigation bar includes the SAN TELEQUIP logo, the title 'Modbus Gateway', and a 'Log out' button. Below the navigation bar are three tabs: 'System', 'Network' (which is active), and 'GateWay'. The 'Wi-Fi' section contains the following fields:

- Network Type: Soft AP
- SSID: Scan button, AJ_9C_65_F9_13_0F_15
- Auth Mode: WPA2-PSK
- Auth Password: 12345678
- Encrypt: AES

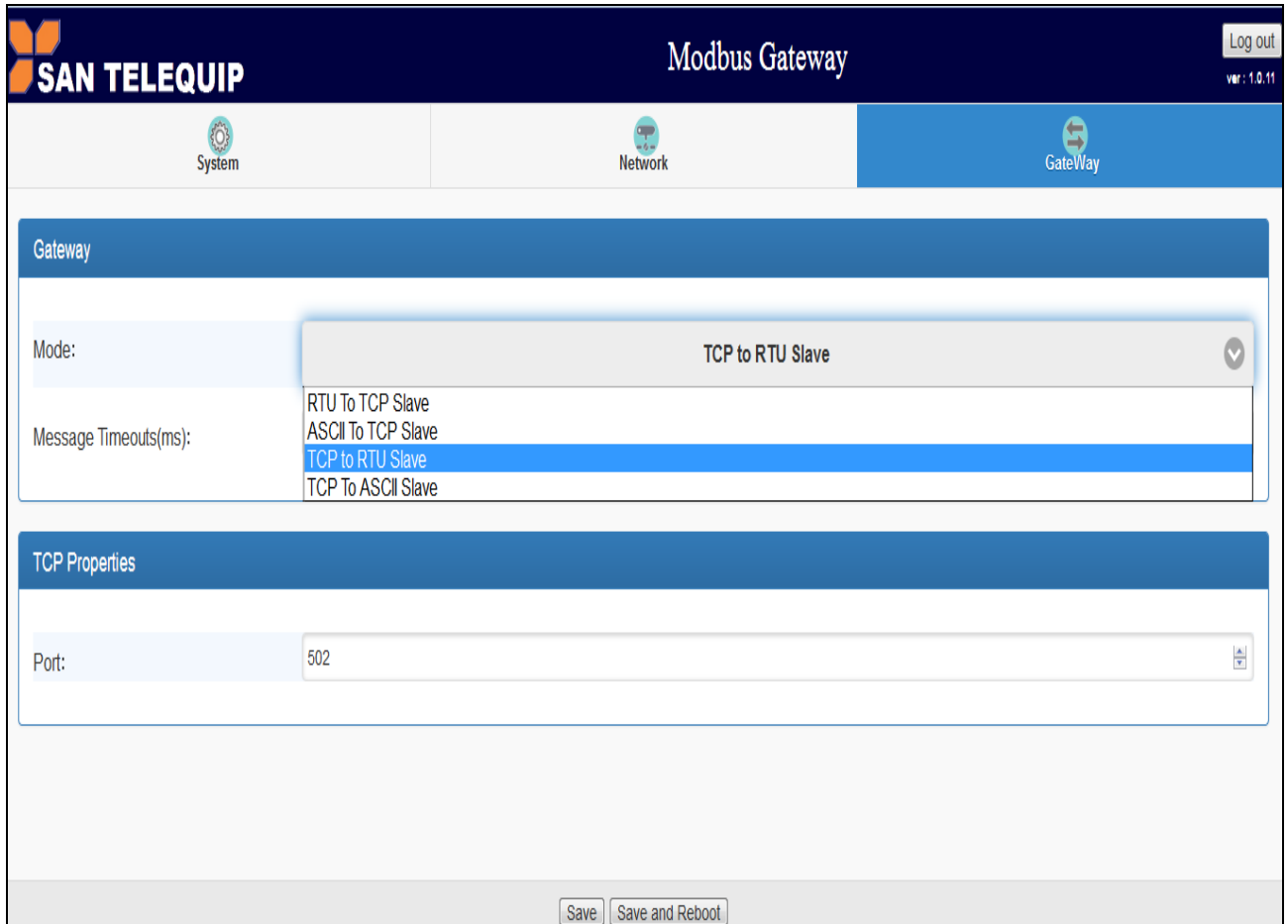
The 'Network' section contains the following fields:

- Network Mode: Fixed Address
- IP address: 192.168.106.215
- Mask: 255.255.255.0
- Gateway: 192.168.106.1
- DNS: 8.8.8.8

At the bottom of the configuration area, there are two buttons: 'Save' and 'Save and Reboot'.

Gateway

There are four modes are selectable as below pictures.

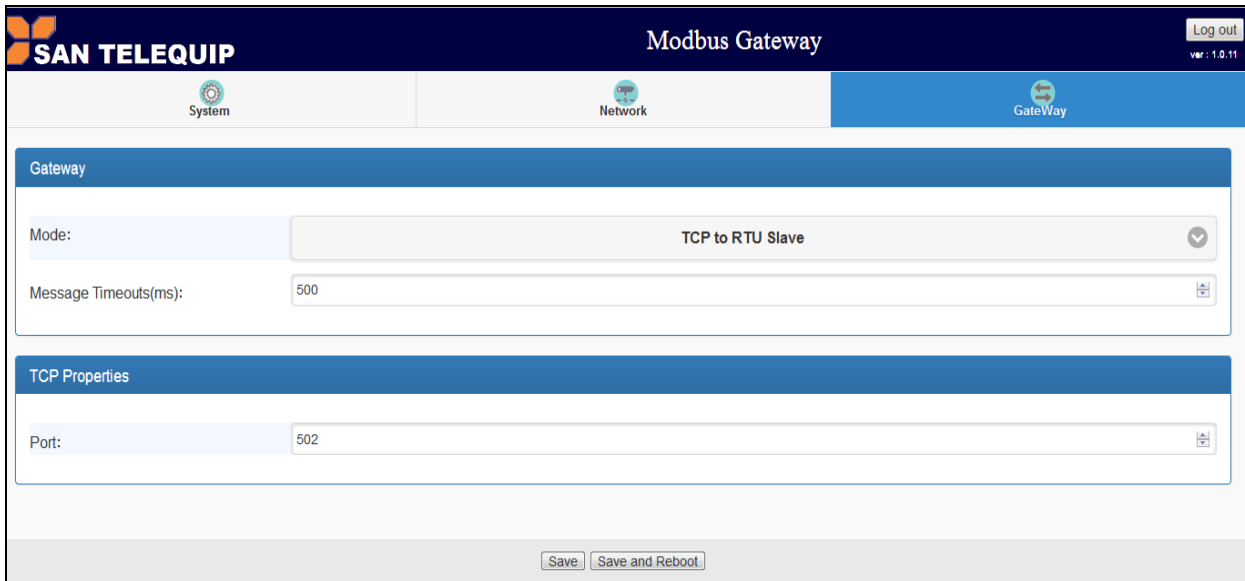


Mode : TCP to RTU Slave
TCP to ASCII Slave
RTU to TCP Slave
ASCII to TCP Slave

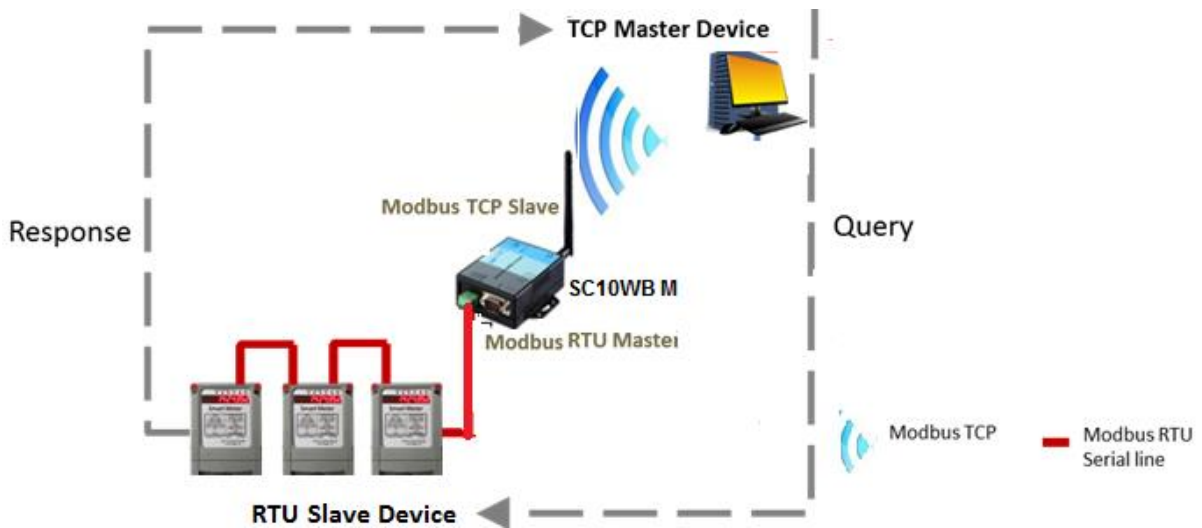
Message Timeouts : default value is 500ms

Port : Port can be specified, if not specified will use the default value 502

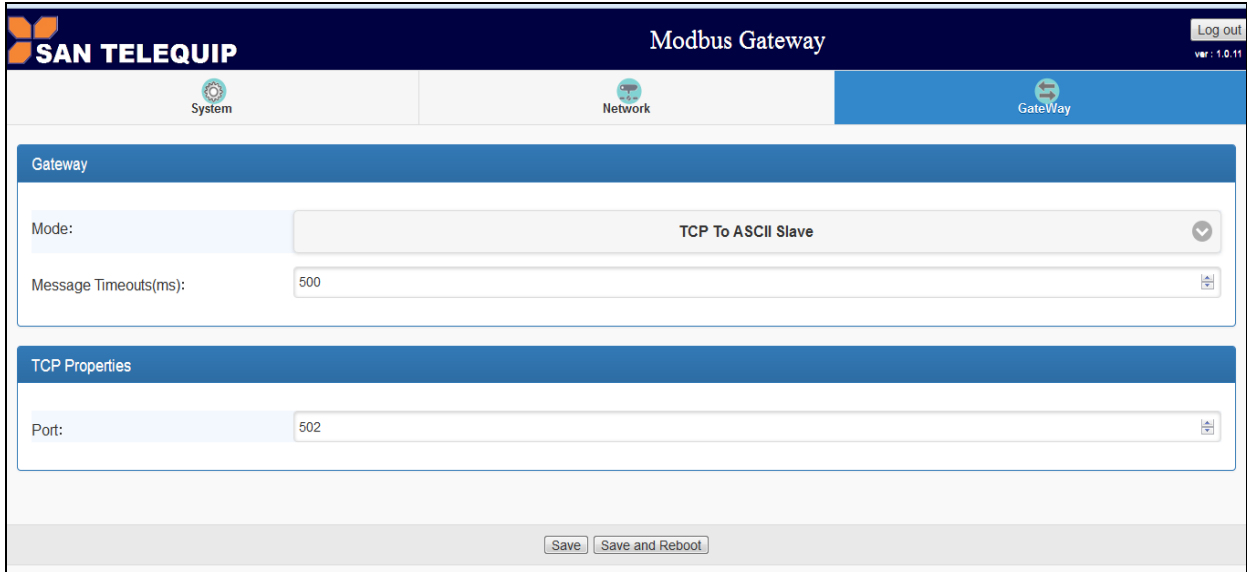
TCP to RTU Slave



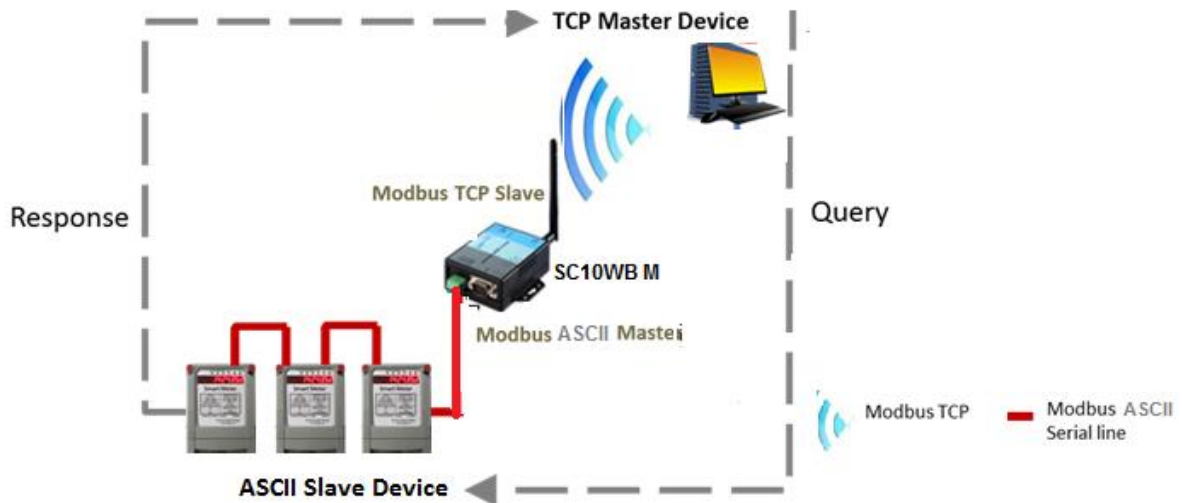
TCP Master Device (ex. Modscan / SCADA system) sends query to RTU Slave device then RTU Slave device response back to TCP Master's requirement. Inside the Modbus gateway, there are TCP Slave & RTU Master counterparts respectively



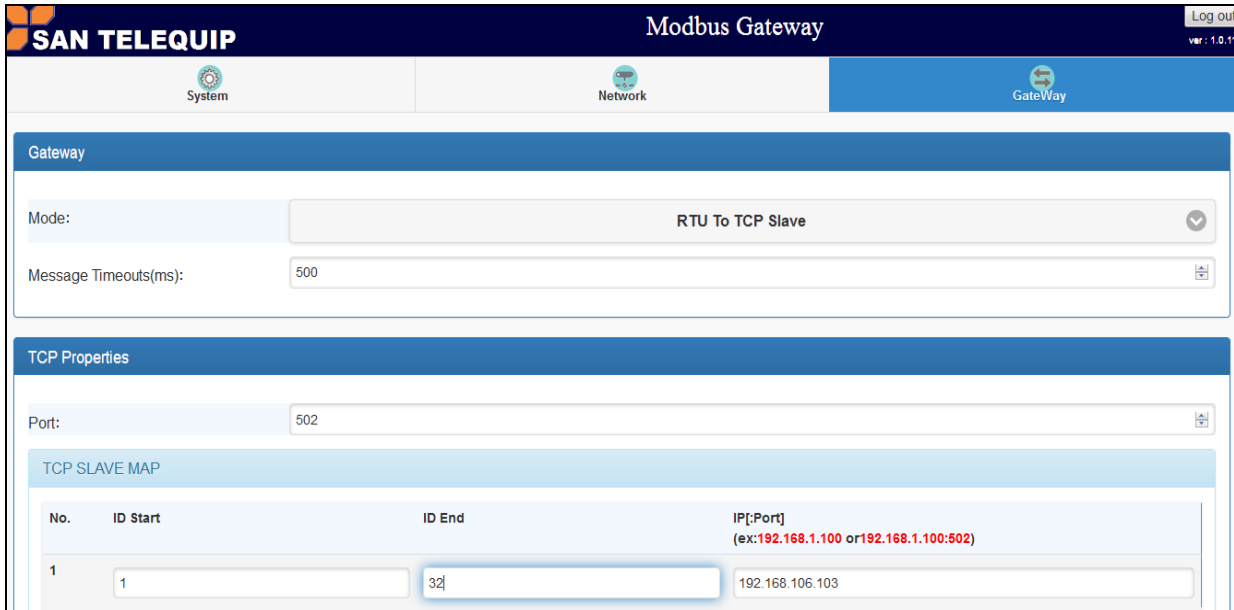
TCP to ASCII Slave



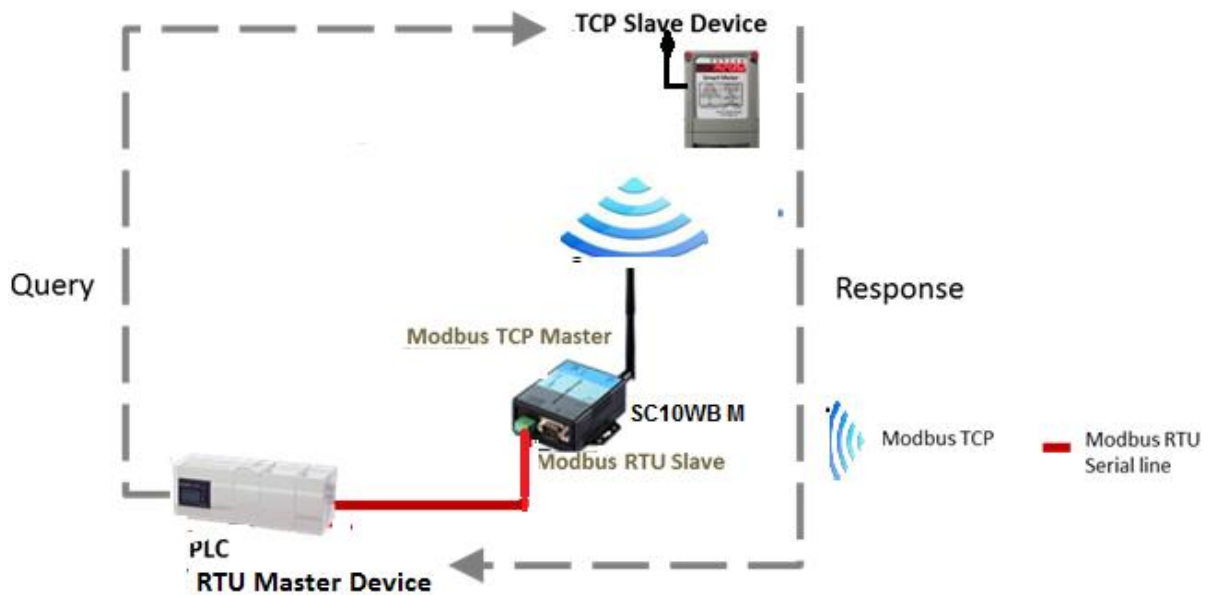
TCP Master Device (ex. Modscan / SCADA system) sends query to ASCII Slave device then ASCII Slave device response back to TCP Master's requirement. Inside the Modbus gateway, there are TCP Slave & ASCII Master counterparts respectively



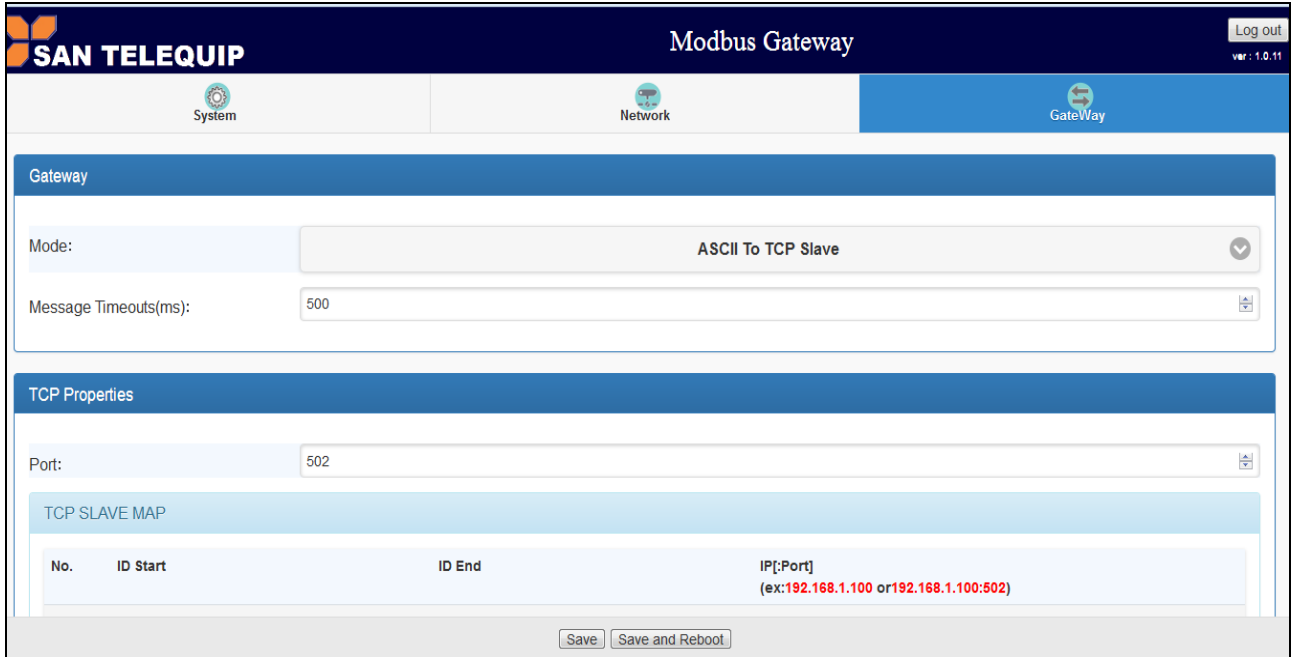
RTU to TCP Slave: TCP Slave device IP address should be entered "TCP SLAVE MAP"



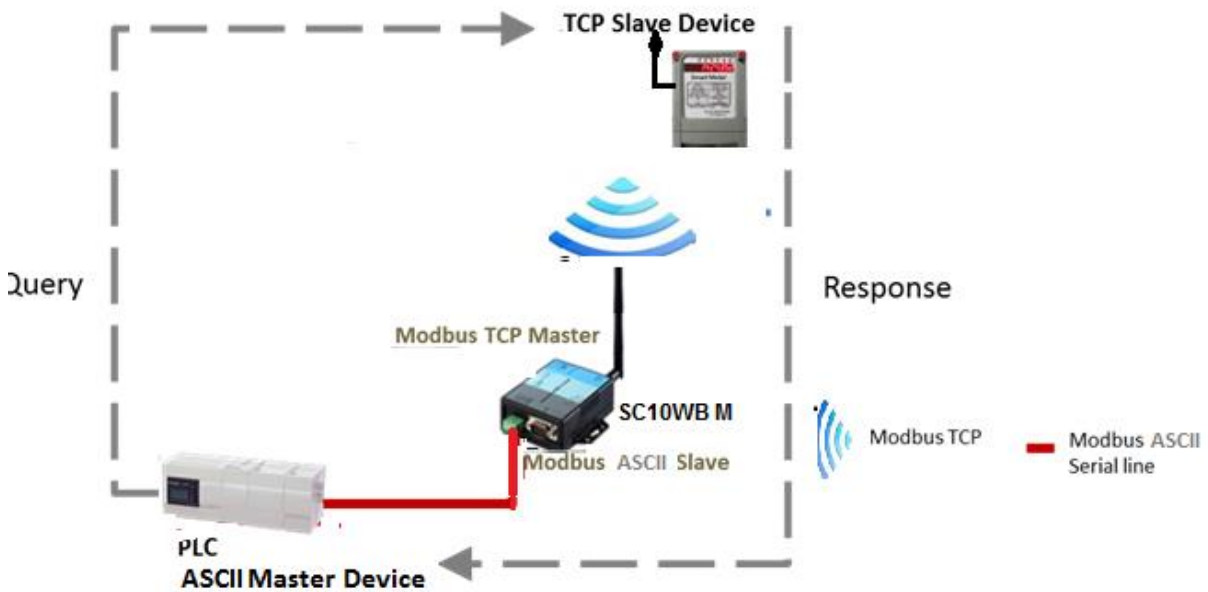
RTU Master Device (ex. PLC / Modscan) sends query to TCP Slave device; then TCP Slave device response back to RTU Master's requirement. Inside the Modbus gateway, there are TCP Master & RTU Slave counterparts respectively.



ASCII to TCP Slave: TCP Slave device IP address should be entered "TCP SLAVE MAP"



ASCII Master Device (ex. PLC / Modscan) sends query to TCP Slave device; then TCP Slave device response back to ASCII Master's requirement. Inside the Modbus gateway, there are TCP Master & ASCII Slave counterparts respectively.

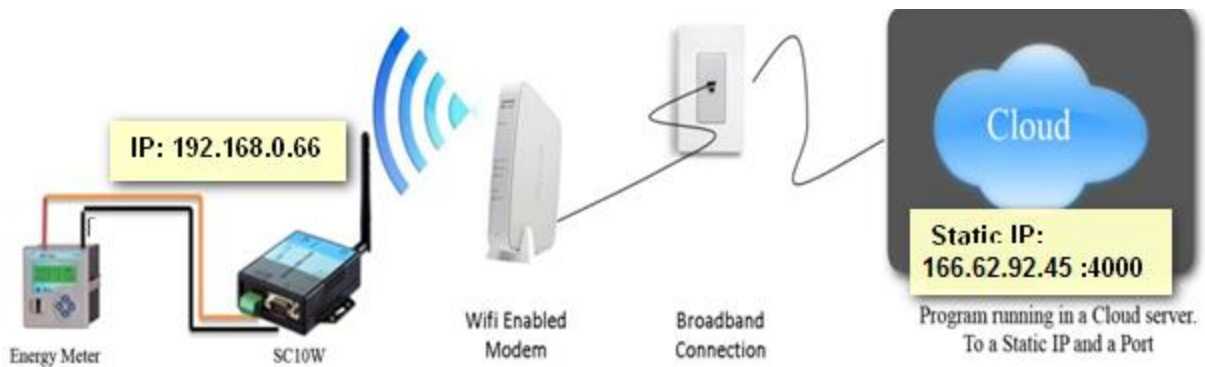


SC10WB M Directly connecting to cloud.

If you want to initialize connection of SC10WB M to a Static IP and Port, and monitor the values of energy meters then mode should be in "client mode".

When you try to communicate in client mode (in local server). It will work perfectly. It establishes connection and the server communicated with meter. But when same thing trying to connect with cloud server, it was unable to connect.

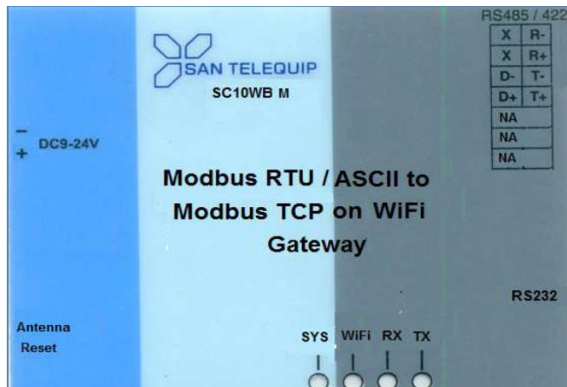
Setup



Port1	
Service Mode	TCP Client Mode ← Device set as TCP Client
Destination Host	166.62.92.45 : 4000 ← Remote cloud server IP address & port #
Force TX Interval Time	0 ms
Idle Timeout	0 (0~65535)seconds
Alive Check	0 (0~65535)seconds
Connect on	<input checked="" type="radio"/> Startup <input type="radio"/> Any Character

Remote cloud server IP address is 166.62.92.45 port number is 4000.
 This IP address & Port # should be the same as that of SC10WB M.

Communication Port Details



RS232 Port Details

9 Pin Male Connector Pin No.	SIGNAL of SC10WB M
2	RX
3	TX
5	GND
7	RTS
8	CTS
4	DTR
6	DSR

For RS422

SIGNAL of SC10WB M	Will Connect to
T+ / D+	RX + of your device.
T - / D-	RX -- of your device.
R +	TX + of your device.
R --	TX - of your device.

For RS485, 2 wire

SIGNAL of SC10MK	Will Connect to
T+ / D +	TX + of your device.
T - / D --	TX -- of your device.

Power Supply

24V DC through 2 Pin screw type connector & RCA Jack for External Adapter.

LED Indications

- SYS : When the Power is on, the LED in ON CPU health, Flashes once a second.
- WIFI : When the Wireless signal is detected, the LED will be blink
- TX/RX : Blink if there is serial port data received and transmitted.