

SEW832 Serial to Ethernet Server

User's Manual



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1. Introduction

This SEW832 Ethernet+WiFi Serial Server provides the ways of connecting serial devices to both Ethernet and Wireless LAN (Wi-Fi 802.11 b/g/n). It is designed to operate serial ports through Ethernet (10/100Mbps) and wireless (Wi-Fi 802.11 b/g/n) over TCP/IP network. As the data is transmitted via TCP/IP protocol, therefore data acquisition and controlling is available to go through Intranet and Internet. There are two serial ports as one is a RS-232 and other one is RS-422/485.

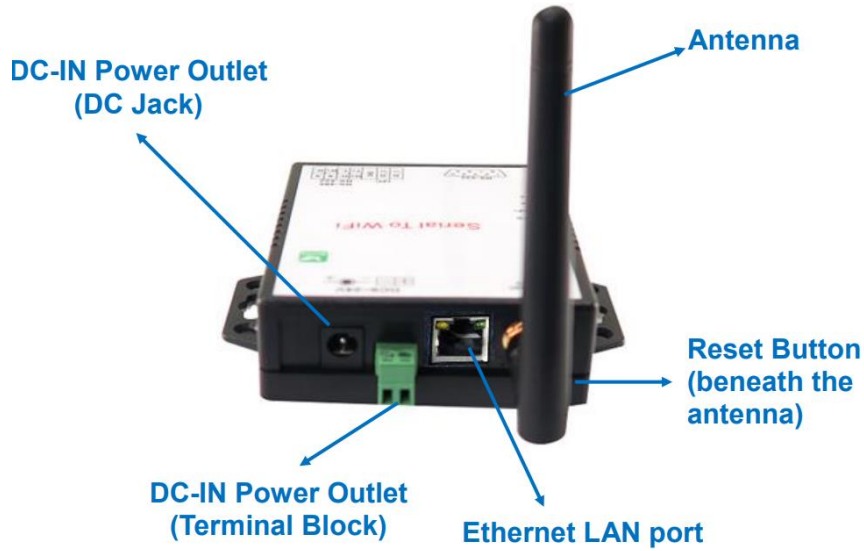
Configuration is easy to operate via web page setup.

This WiFi Serial Server is a high performance design composed with carefully selecting qualified components from reliable and certified sources. This operation manual will guide you to configure functions step by step.

This WiFi Serial Server provides TCP Server Mode, TCP Client Mode, and UDP Mode for selection. It also supports manual configuration via web browser and support various protocols including HTTP, DHCP, ICMP, and ARP. These are the best solution to coordinate your Serial interface devices.

1.1 Product Views

Antenna Side



Serial Interface Side



Figure 1 Product Views

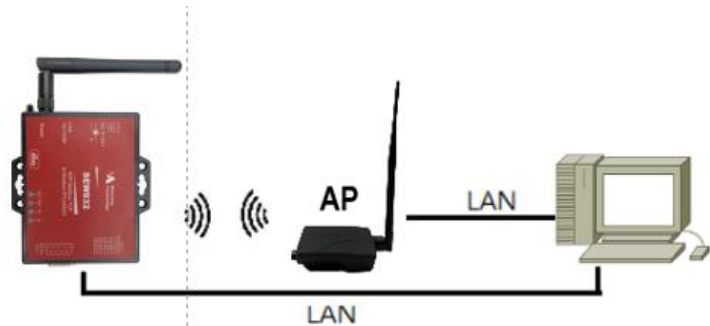
1.2 Wiring Architecture

1. RS-232

RS-232 Wiring

Serial Device

DB 9 ————— DB 9

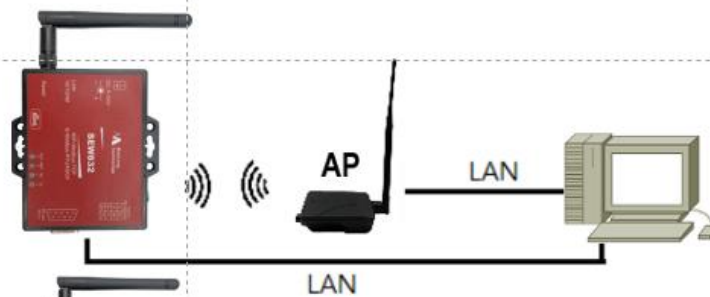


2. RS-422/RS-485

RS-422 Wiring

Serial Device

T- ————— R-
T+ ————— R+
R- ————— T-
R+ ————— T+



RS-485 Wiring
Serial Device

D+ ————— D+
D- ————— D-

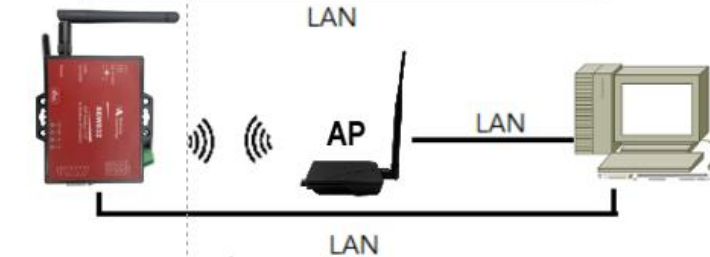


Figure 2 Wiring Architecture

2. Configuration

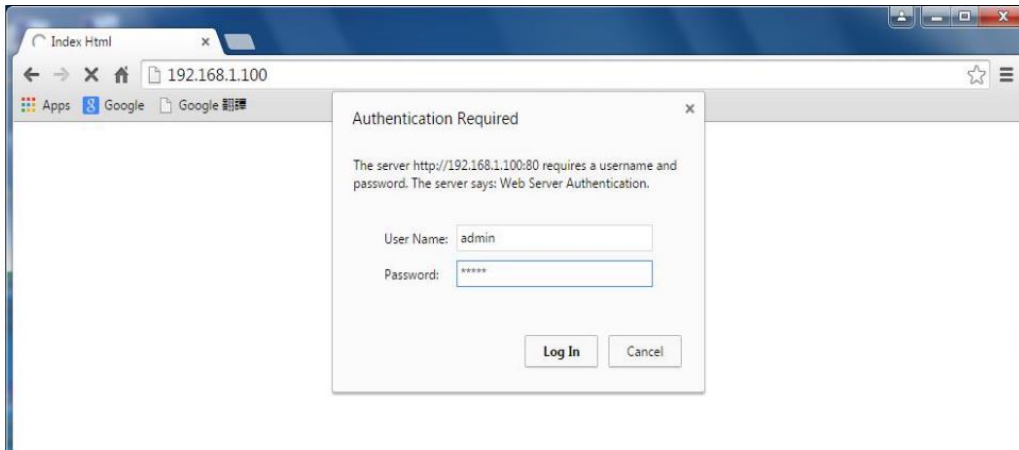
2.1 Configuration Via Web

Step1 → The first thing is to configure the Host PC's IP address

IP :192.168.1.xx

Step2 → Open a web page of configuration <http://192.168.1.100>

Step3 → Default *User name: "admin" and Password: "admin"*



Step4➔And now you have successfully connected to this Modbus gateway



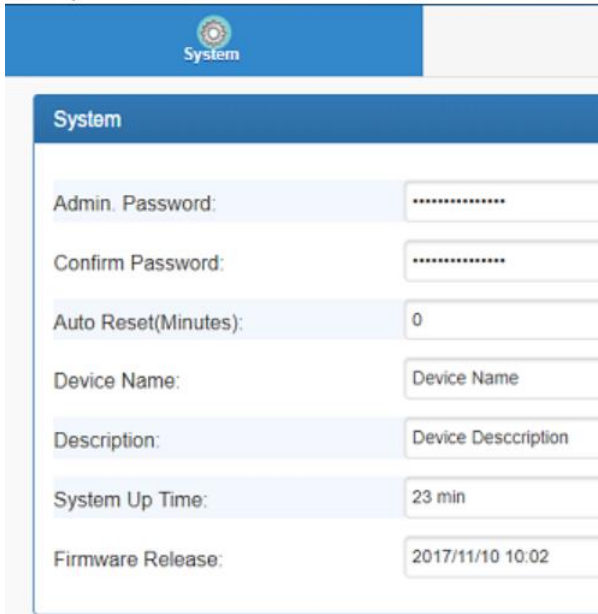
2.2 Configuration Sections

There are 4 pages as per “System”, “Network”, “Serial” and “Over TCP/IP”.



2.2.1 System Setup

1. System: Where one can change Password, set up Auto Reset time and modify Device Name, Description of device etc.



The screenshot shows a web interface for system configuration. At the top, there is a blue header with a gear icon and the word "System". Below this is a white content area with a blue "System" header. The main area contains several configuration fields:



Admin. Password:	*****
Confirm Password:	*****
Auto Reset(Minutes):	0
Device Name:	Device Name
Description:	Device Description
System Up Time:	23 min
Firmware Release:	2017/11/10 10:02

2. Appearance of Wireless and Ethernet setup:

Wireless	
IP Address:	10.0.0.1
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.1
MAC Address:	9c:65:f9:24:55:56

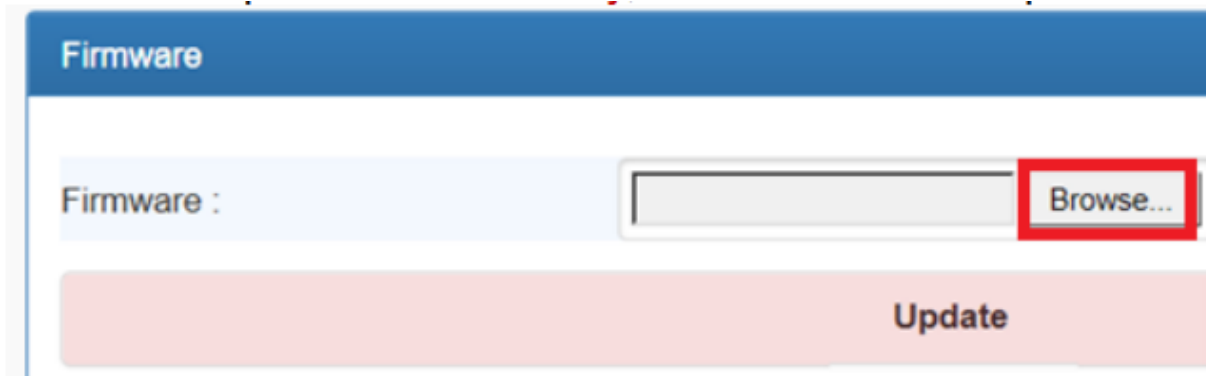
Ethernet	
IP Address:	192.168.1.199
Subnet Mask:	255.255.255.0
Gateway:	192.168.1.1
MAC Address:	9c:65:f9:24:2a:36

3. NTP: Enable / Disable NTP function; Set up NTP server and Time Zone.

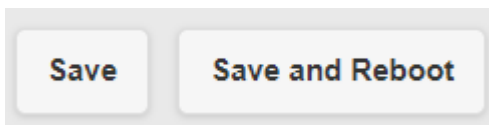
SERVICES	
HTTP Port	80
NTP Enabled:	Enabled 
NTP Server :	openwrt.pool.ntp.org
NTP Offset :	UTC 

4. Firmware update:

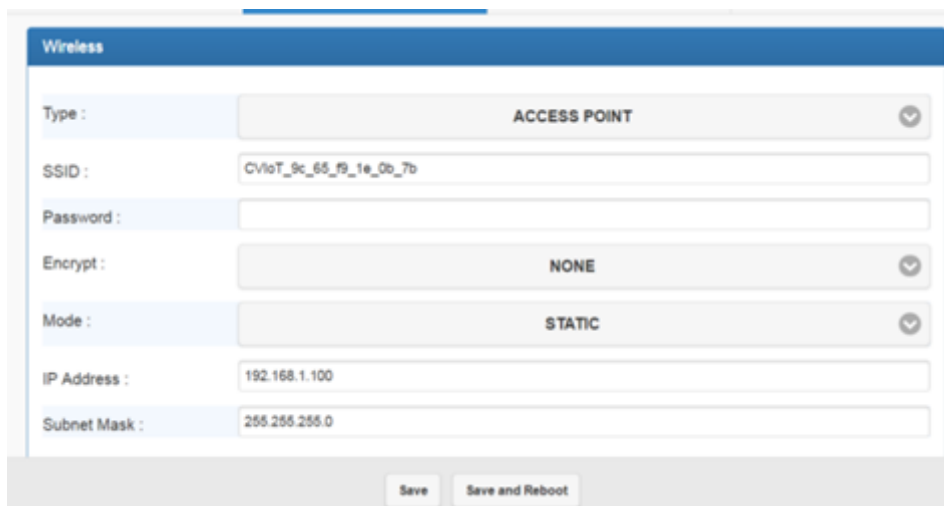
(1) If necessary, click “Browse” to open file manager



- (2) Select the file with specified version and click “Confirm” button.
 - (3) When the selected file name appears on the input column, click “Update” button.
5. Up to now, Setup is successfully configured. Please click “Save” this page before “Save and Reboot” for permanent web pages.



2.2.2 Network Setup



- 1. Wireless section:

(1) Type: to select “INFRASTRUCTURE” or “ACCESS POINT”

Wireless

Type: ACCESS POINT

SSID: INFRASTRUCTURE

Password: ACCESS POINT

Encrypt: DISABLED

Mode: WPA2

Mode: STATIC

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

(2) When selected “INFRASTRUCTURE”, go to SSID, click “Scan” will get list of available SSID, select one to link.

Wireless

Type: []

SSID: [Scan]

SSID	MAC	Strength
NAS-AP	74:DA:38:33:EA:EE	100%
edimax_2.4G	74:DA:38:14:A2:D0	73%
nhrm	B8:55:10:C8:AC:72	7%
Burn_in_test_1	00:02:70:65:99:A4	96%
Fortune	5C:F4:AB:5F:J*44	10%
CHT Wi-Fi Auto	1C:AF:F7:35:36:96	7%
CHT Wi-Fi(HiNet)	1E:AF:F7:35:36:96	57%

Close

(3) Input password for the AP and assign STATIC IP address

Wireless

Type: INFRASTRUCTURE

SSID: [Scan] edimax_2.4G_ksh

Password: arp78945612

Encrypt: WPA2

Mode: **STATIC**

IP Address: **192.168.1.100**

Subnet Mask: **255.255.255.0**

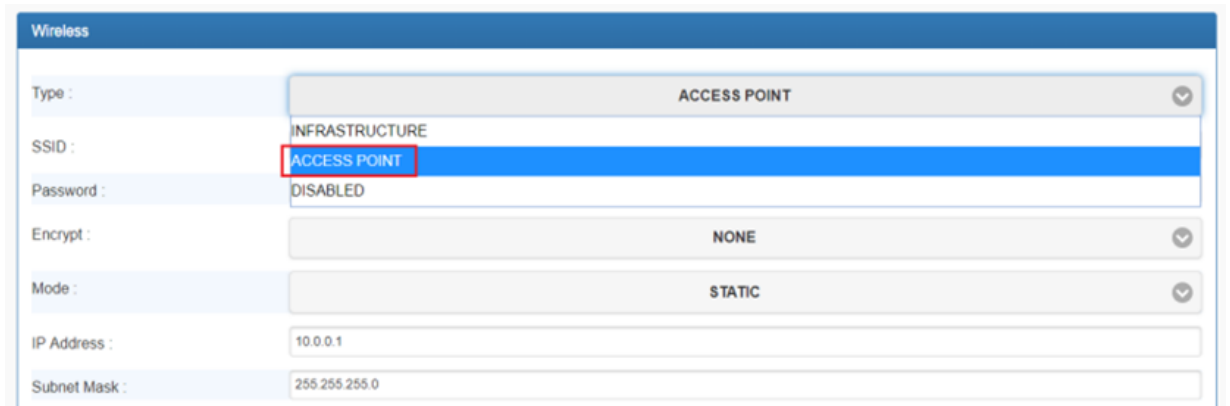
Save Save and Reboot

(4) In NB/PC, choose same SSID to link. NB/PC must close Ethernet in

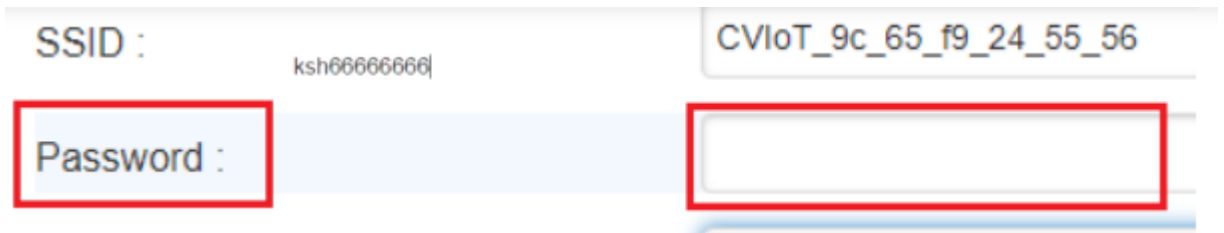
advance



2. When selected "ACCESS POINT", Converter acts as an Access Point which is allowed to be connected by PC /NB /Smart Phone/ PAD. It supports DHCP server function. Soft AP broadcasts its SSID "CVIoT_XX_XX_XX_XX_XX_XX". PC /NB /Smart Phone/PAD should connect to this SSID and then open web browser with default IP for Converter setup.

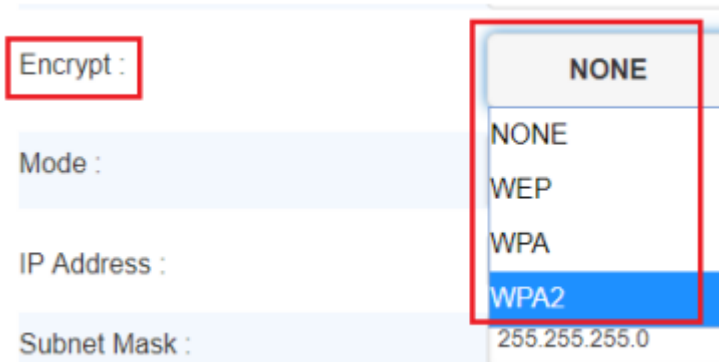


3. Password: Key in selected AP log in password



SSID : ksh66666666 CVIoT_9c_65_f9_24_55_56
Password :

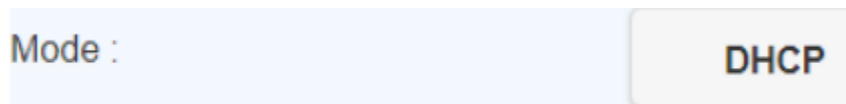
4. Encrypt



Encrypt : **NONE**
Mode : NONE
IP Address : WEP
Subnet Mask : WPA
255.255.255.0
WPA2

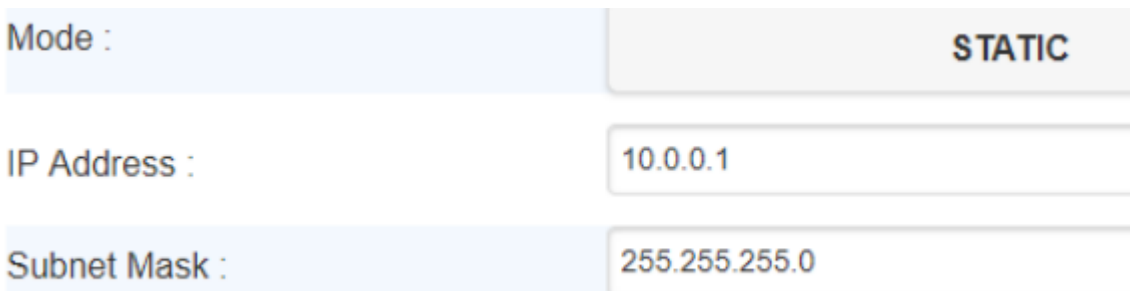
5. Mode: IP Address

(1) "DHCP": Let AP to assign IP address to itself



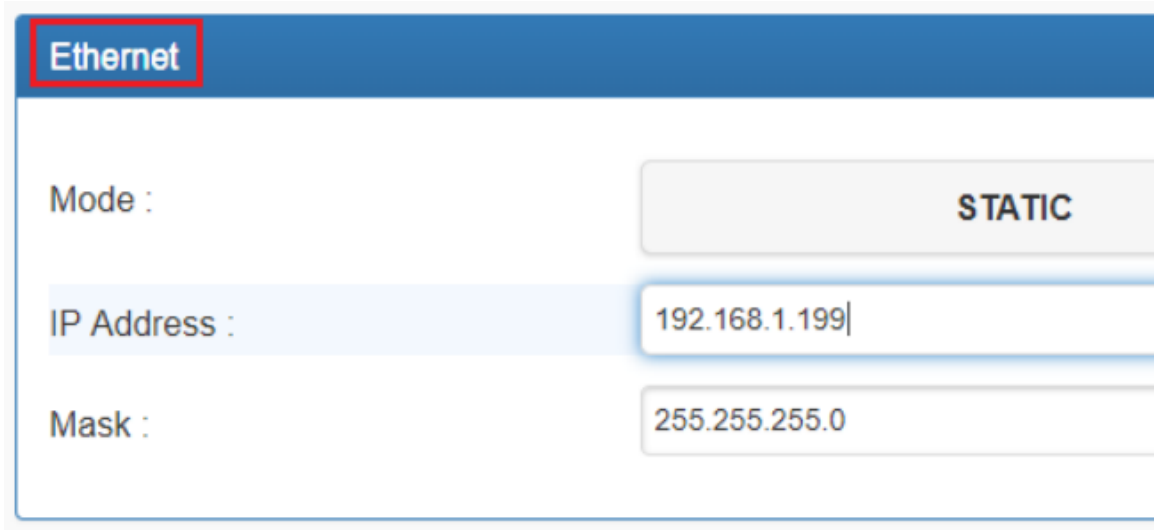
Mode : DHCP

(2) "STATIC": To input assigned IP address, Subnet Mask.



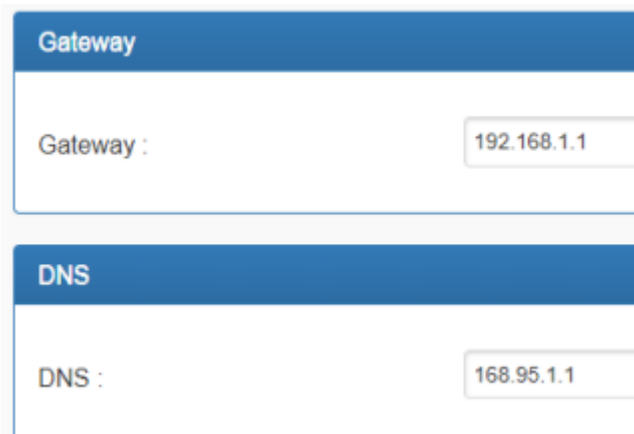
Mode : STATIC
IP Address : 10.0.0.1
Subnet Mask : 255.255.255.0

6. Ethernet: select STATIC or DHCP to assign IP address.



Ethernet	
Mode :	STATIC
IP Address :	192.168.1.199
Mask :	255.255.255.0

7. Gateway and DNS: To check with MIS for right IP address.

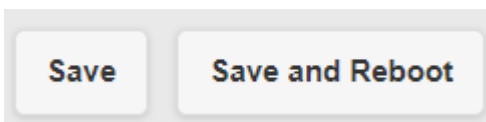


Gateway	
Gateway :	192.168.1.1

DNS	
DNS :	168.95.1.1

※The Gateway must be set with correct IP enable to connect with Internet.

8. Up to now, Setup is successfully configured. Please click “Save” this page before permanent change of configuration.



Save	Save and Reboot
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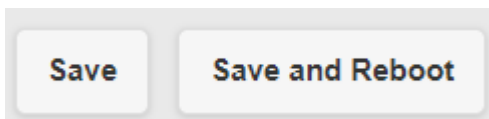
2.2.3 Serial Port Setup

Input each parameters to match with the remote terminal units.

1. Baud Rate
2. Parity
3. Data Bits
4. Stop Bits
5. Flow Control
6. RxDelay(ms)
7. TxDelay(ms)

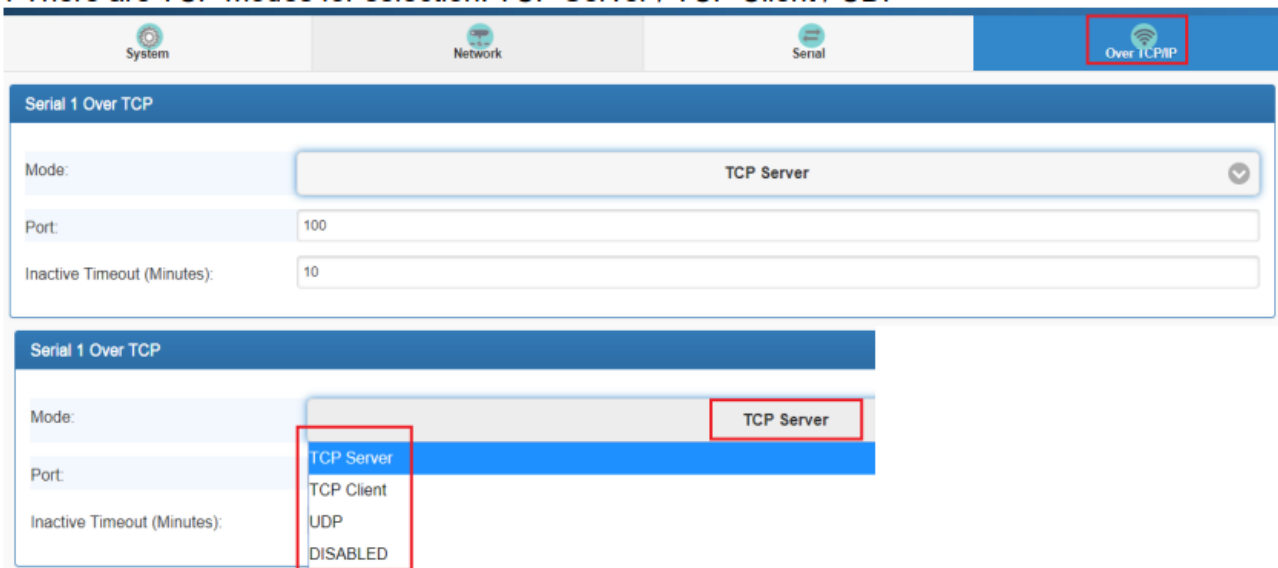


9. Click "Save" this page before permanent pages



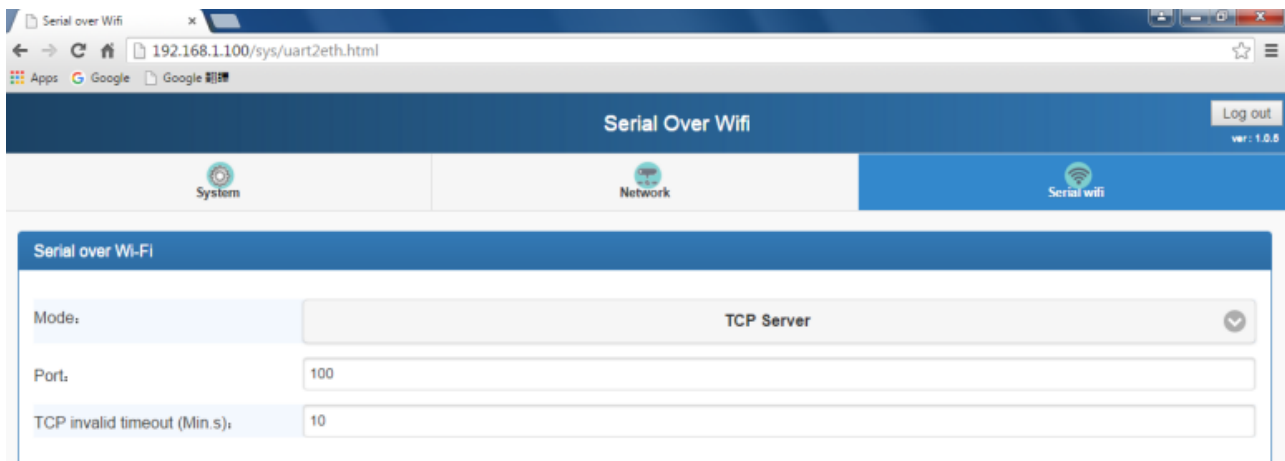
2.2.4 Serial Port Overt TCP/IP Setup

There are TCP modes for selection: TCP Server / TCP Client / UDP



1. Configure as TCP Server

Configure TCP server port number and message time out period. At this mode, this device will wait for client connection.



2. Configure as TCP Client

Allow to configure 4 remote destination host IP address, port number. At TCP client mode, Serial Server establishes a connection with remote host and sending data to remote host actively.

No.	Destination IP	Port
1	192.168.1.10	100
2		
3		
4		

3. Configure as UDP

Picture as above TCP client mode. Allow to configure 4 remote destination host IP address, port number. At UDP mode, this Device establishes a connection with remote host and sending data to remote host actively.

2.2.5 Reset Button

If any chance you forgot the login password or have incorrect settings making this Device inoperable, upon the power is on and the "SYS" LED light on, use a point tip to press this button and hold it for more than 20 seconds the release the point tip. The Device will reboot and all the parameters will be reset to the factory default.