# **Serial to Ethernet Converter**

# **HL-SE03P-V1**

# **User's Manual**





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## Welcome

HL-SE03P-V1 – 2 Port Serial to Ethernet converter is designed to offer the high speed, reliable and cost-effective network communication for multiple serial devices to Internet networking instantly. It's easily network your current RS-232/422/485 serial devices over a TCP/IP-based Ethernet and supported Full TDD (Time Division Duplex) serial to Ethernet communication.

## **■** Package Contents

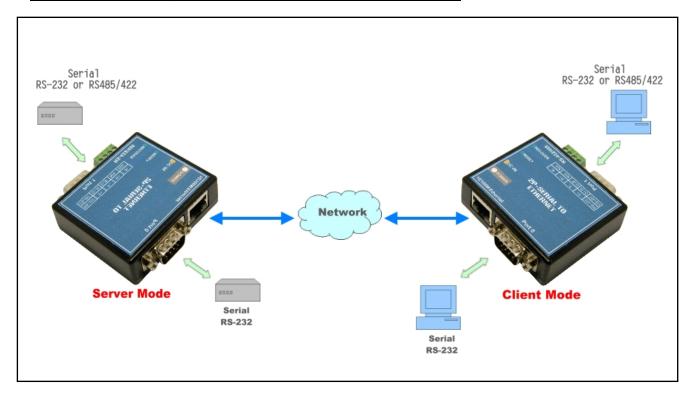
	HL-SE03P-V1 – 2 Port Serial to Ethernet Converter	X 1
>	5V-DC USB Power Adapter	x 1
	USB Power Cable	x 1
	User's Manual	x 1

### **■** Feature

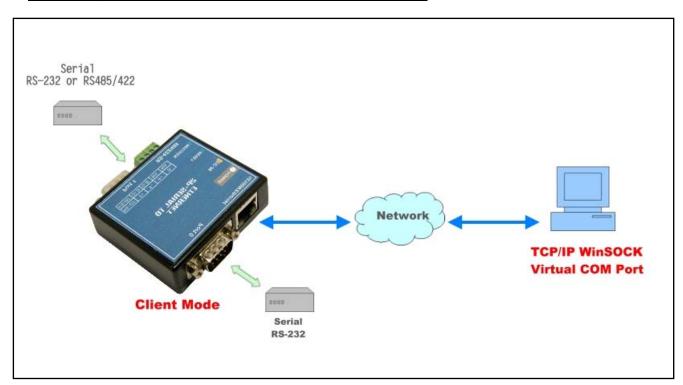
- Mini size design: 65\*67\*21 mm.
- > 32-Bit ARM7 CPU.
- > Build-in WEB-Based Configuration.
- Support UPnP (Universal Plug and Play)
- ➤ 10/100 Mbps Auto-Sensing Ethernet Interface.
- > Support TCP-Server, TCP-Client Auto-Connect Mode.
- Support WinSock Protocol
- At Client-Server Mode, Client-device will auto-connect to Server-device.
- Support 2 serial devices through an Ethernet networking simultaneously.
- Support RS-232/422/485 Interface.
- Support Standard WinSock ( Program Writing "Call MSCOMM.OCX" )
- Support Hardware Flow Control: CTS / RTS
- Support Parity: None, Odd, Even, Mark, Space
- Support Stop Bit: 1, 2
- Support Data Bit: 5, 6, 7, 8
- ➤ Baud Rate up to 1024000bps = 1Mbit/Sec.
- Port 0 Baud Rate:
  - 110/300/600/1200/2400/4800/9600/14400/19200/38400/57600/115200/230400bps
- Port 1 Baud Rate: 110/300/600/1200/2400/4800/9600/14400/19200/38400/57600/115200/230400/460800/1024000bps

# **■** Application

## >> Implementing a Serial Extender over Ethernet



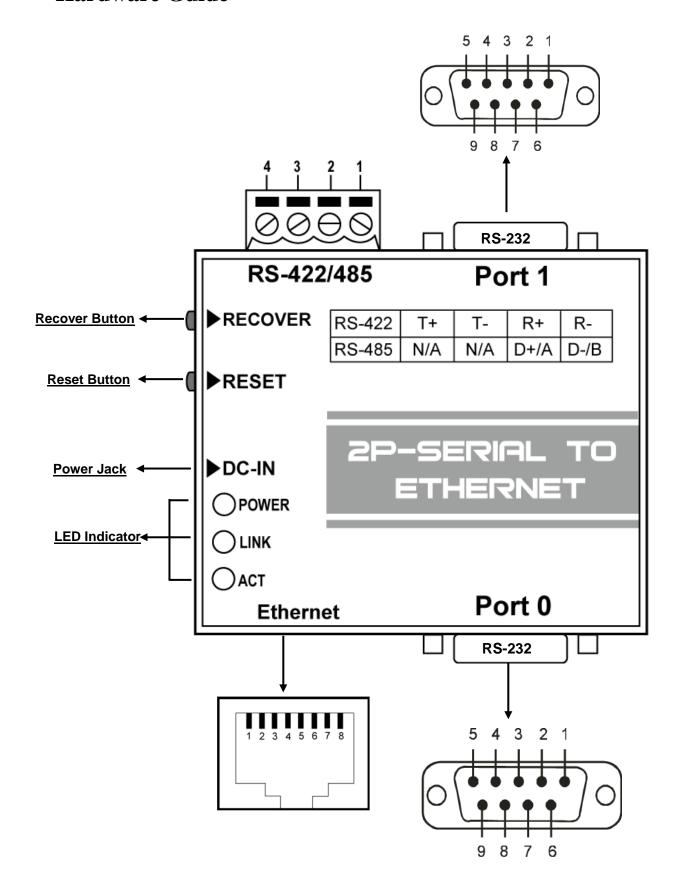
## >> Using Serial-to-Ethernet as a Virtual COM



# **■** Specification

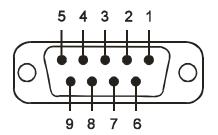
Model Name HL-SE03P-V1				
Network Interface				
Connector RJ45				
Interface Ethernet 10Base-T or 100Base-TX (Auto-Sensing)				
Setup	HTTP Browser Setup			
Mode	TCP Server/TCPIP Client /UDP Client			
Protocols	Protocols ARP, IP, ICMP, UDP, TCP, HTTP, DHCP, Telnet			
Serial Interface				
Port 0	RS-232 D-SUB 9-pin Connector			
Port 0 Data Rates	Up to 230,400 bits/sec			
Port 1	RS-232 D-SUB 9-pin Connector	RS-422/485 Terminal Connector		
Port 1 Data Rates	Data rate up to 1 Mbit/sec.	Data rate up to 115200		
Data Bit	7 or 8			
Stop Bits	1 or 2			
Parity None, Odd, Even				
Flow Control	Flow Control RTS/CTS			
Current Consumption Max. 145 mA				
Input Voltage 5V DC				
Operating Temperature 0 ~ +60℃				
Storage Temperature -10 ~ +70℃				
RoHS Compliant with RoHS				
Dimensions 65*67*21(H)mm				

## **■** Hardware Guide



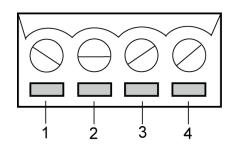
# **■** Pin Assignments

### Port 0 & Port 1 - RS-232 DB9



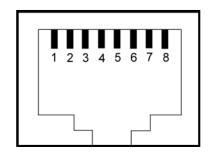
Pin	Signal	Direction	
2	TxD	Output	Transmitted data
3	RxD	Input Received data	
5	Gnd	N/A Signal ground	
7	CTS	Input Clear to send	
8	RTS	Output Request to send	
9	Vcc	Input N/A	

### Port 1 - RS-422/485



Terminate	RS-422 Mode	RS-485 Mode
Pin 1	R-	D-/B
Pin 2	R+	D+/A
Pin 3	T-	N/A
Pin 4	T+	N/A

## **Ethernet Port**



Pin	Signal	Direction	Line Color
1	TX+	Output ←	White Orange
2	TX-	Output ←	Orange
3	RX+	Input →	White Green
6	RX-	Input →	Green

## ■ Factory Default Value

Default Device name : SE03P

Default IP Address : 192.168.1.254

Default IP Subnet Mask : 255.255.255.0

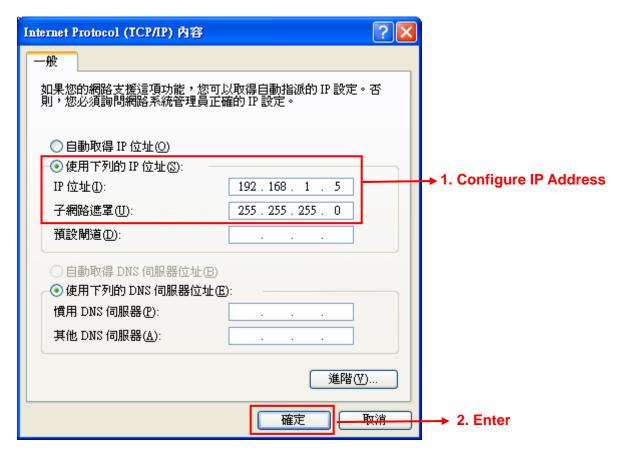
➤ WEB-Based Configuration : http://192.168.1.254

Default Password : 123456

## Configuration

### Preparation

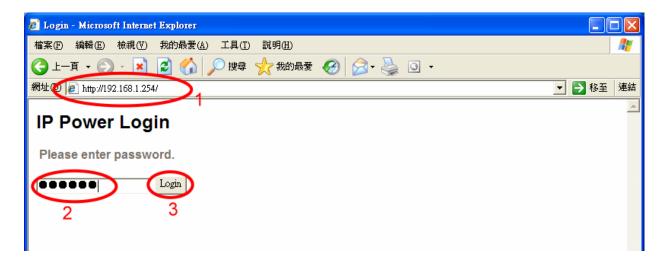
1. IP Address Setting - Configure Computer IP address to same as HL-SE02P-V3.



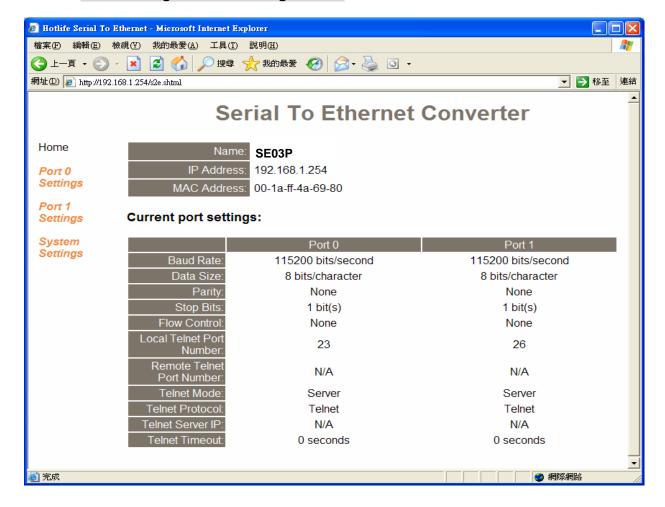
- 2. Connecting Power Connect power adapter with Power Jack of HL-SE03P-V1. If the power is properly supplied then the LED indicator will light and show "Red" color.
- **3. Connecting Network** Connect one end of the Ethernet cable to HL-SE03P-V1 10/100M Ethernet port and the other end of Ethernet cable to Ethernet network.
- **4. Connecting Serial Device** Connect Serial port of to HL-SE03P-V1 to Serial devices.

### Login WEB-Based Configuration

- 1. Open your browser and link to http://192.168.1.254
- 2. Type the password \*\* **Default Password: 123456** \*\*
- 3. Press "Login" button.



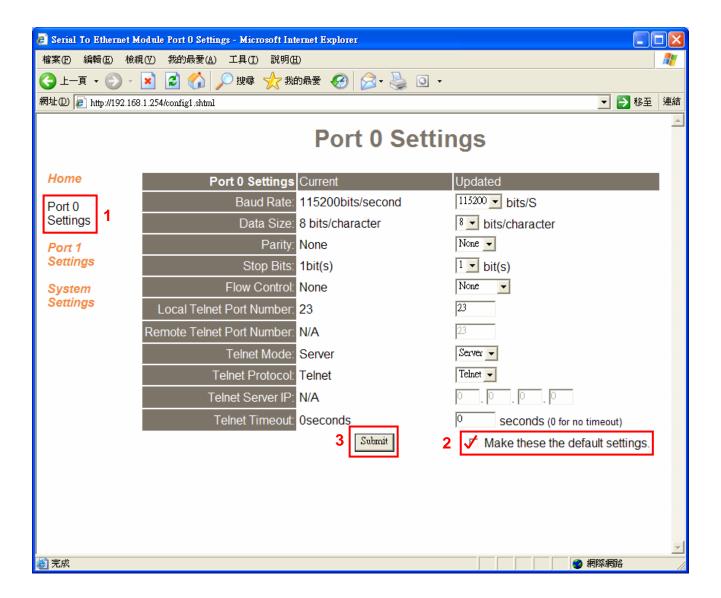
4. Success Login to Web Configuration



### Port 0 - Setting

Click the "Port 0" to change RS-232 parameters as you need.

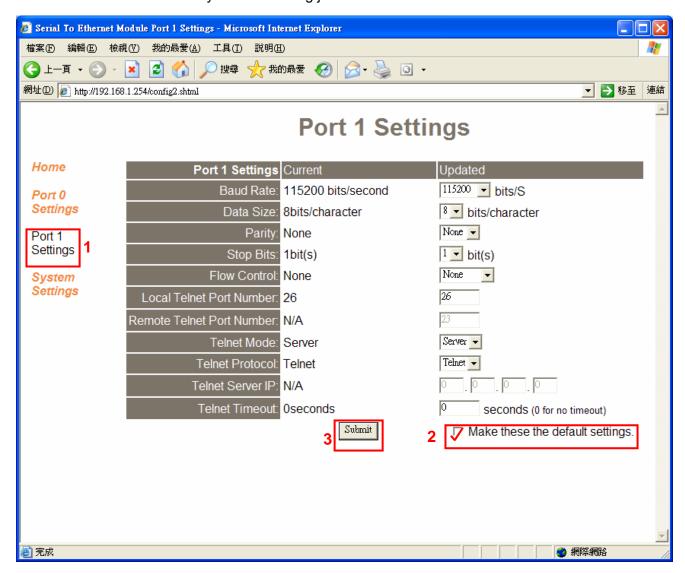
After parameters changed, you must select "Make these the default settings" then press "Submit" button then your new setting just will work successful.



### Port 1 – Setting

Click the "Port 1" to change Serial parameters as you need.

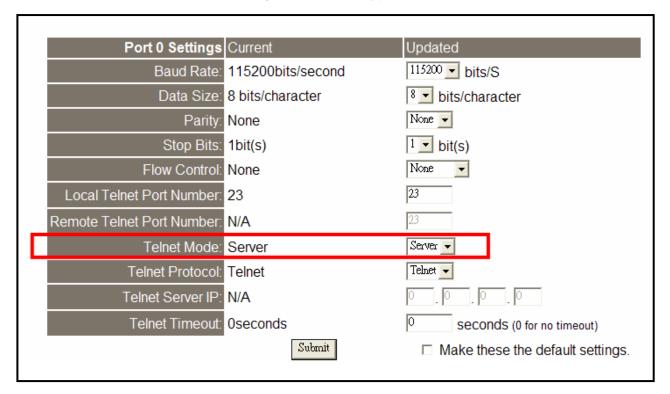
After parameters changed, you must select "Make these the default settings" then press "Submit" button then your new setting just will work successful.



#### Server Mode

Factory default Telnet mode is Server mode and waiting for link.

Client device is able link Server by **WinSock** or **Hyper Terminal** 

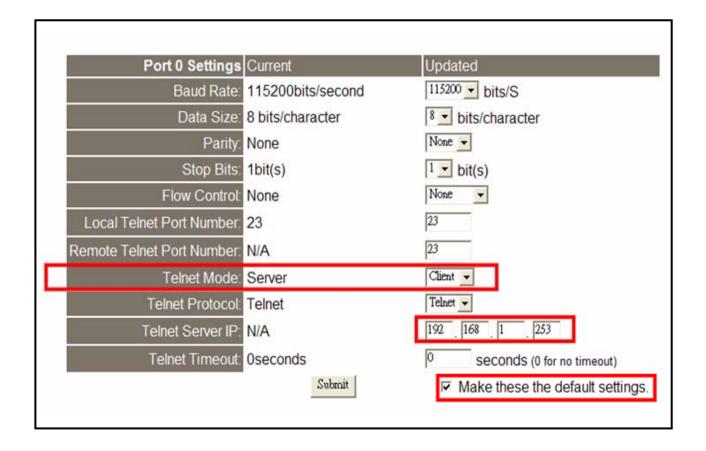




#### Client Mode

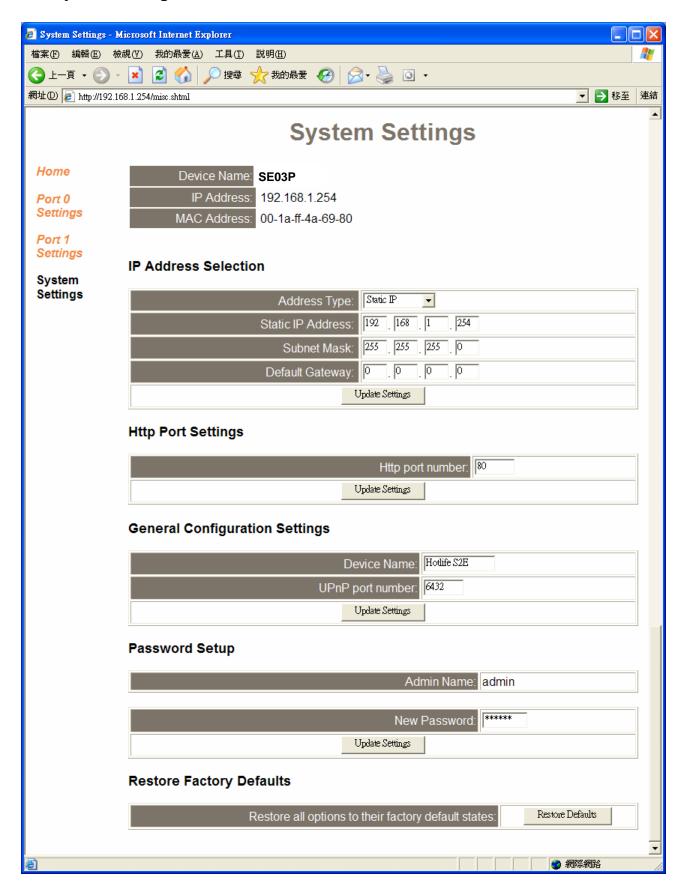
Telnet Client mode supports **Auto-Connect** to Server device and you must type **Server IP address** in Client Serial parameters setting first.

After parameters changed, you must select "Make these the default settings" then press "Submit" button then your new setting just will work successful.



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### System Setting



### Hardware Recover Factory Default

- 1. Turn off power.
- 2. Keep press "Recover" button of HL-SE03P-V1 then turn on power after 5 seconds take your hand off Recover button then HL-SE03P-V1 will become factory default value.

## **■** Warranty Policy

- 1. This device is guaranteed against manufacturing defects for one full year from the original date of purchase.
- 2. This warranty is valid at the time of purchase and is non-transferable.
- 3. This warranty must be presented to the service facility before any repair can be made.
- 4. Sales slip or other authentic evidence is required to validate warranty.
- 5. Damage caused by accident, misuse, abuse, improper storage, and/or uncertified repairs is not covered by this warranty.
- 6. All mail or transportation costs including insurance are at the expense of the owner.
- 7. Do not send any product to service center for warranty without a RMA (Return Merchandise Authorization) and proof of purchase. Ensure a trackable method of delivery is used (keep tracking number).
- 8. Warranty is valid only in the country of purchase.
- 9. We assume no liability that may result directly or indirectly from the use or misuse of these products.
- 10. This warranty will be voided if the device is tampered with, improperly serviced, or the security seals are broken or removed".