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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 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

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

RS-422/485

<table>
<thead>
<tr>
<th>Port 1</th>
<th>RS-422</th>
<th>T+</th>
<th>T-</th>
<th>R+</th>
<th>R-</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-422</td>
<td>T+</td>
<td>T-</td>
<td>R+</td>
<td>R-</td>
<td></td>
</tr>
<tr>
<td>RS-485</td>
<td>N/A</td>
<td>N/A</td>
<td>D+/A</td>
<td>D-/B</td>
<td></td>
</tr>
</tbody>
</table>

- Recover Button
- Reset Button
- Power Jack
- LED Indicator

2P-Serial to Ethernet

Ethernet

Port 0

RS-232

Diagram of serial to Ethernet converter with labels for recover, reset, power jack, and LED indicator.
## Pin Assignments

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

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>TxD</td>
<td>Output Transmitted data</td>
</tr>
<tr>
<td>3</td>
<td>RxD</td>
<td>Input Received data</td>
</tr>
<tr>
<td>5</td>
<td>Gnd</td>
<td>N/A Signal ground</td>
</tr>
<tr>
<td>7</td>
<td>CTS</td>
<td>Input Clear to send</td>
</tr>
<tr>
<td>8</td>
<td>RTS</td>
<td>Output Request to send</td>
</tr>
<tr>
<td>9</td>
<td>Vcc</td>
<td>Input N/A</td>
</tr>
</tbody>
</table>

### Port 1 - RS-422/485

<table>
<thead>
<tr>
<th>Terminate</th>
<th>RS-422 Mode</th>
<th>RS-485 Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin 1</td>
<td>R-</td>
<td>D-/B</td>
</tr>
<tr>
<td>Pin 2</td>
<td>R+</td>
<td>D+/A</td>
</tr>
<tr>
<td>Pin 3</td>
<td>T-</td>
<td>N/A</td>
</tr>
<tr>
<td>Pin 4</td>
<td>T+</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Ethernet Port

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Direction</th>
<th>Line Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TX+</td>
<td>Output ←</td>
<td>White Orange</td>
</tr>
<tr>
<td>2</td>
<td>TX-</td>
<td>Output ←</td>
<td>Orange</td>
</tr>
<tr>
<td>3</td>
<td>RX+</td>
<td>Input →</td>
<td>White Green</td>
</tr>
<tr>
<td>6</td>
<td>RX-</td>
<td>Input →</td>
<td>Green</td>
</tr>
</tbody>
</table>
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.

   ![Configure IP Address]

   1. Configure IP Address
   2. Enter

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.

![Login WEB-Based Configuration](image)

4. Success Login to Web Configuration

![Success Login to Web Configuration](image)
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.

![Image of Telnet Mode settings]

![Image of Hyper Terminal setting]

* Mode  
* COM Port Number  
* IP Address  
* Mode  

Submit  
Make these the default settings.
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.
System Setting

Home

Port 0 Settings

Port 1 Settings

System Settings

IP Address Selection

Device Name: SE03P
IP Address: 192.168.1.254
MAC Address: 00-1a:ff:4a-69-80

IP Address:
- Address Type: Static IP
- Static IP Address: 192.168.1.254
- Subnet Mask: 255.255.255.0
- Default Gateway: 0.0.0.0

Update Settings

Http Port Settings

Http port number: 80
Update Settings

General Configuration Settings

Device Name: Multi SE
UPnP port number: 8032
Update Settings

Password Setup

Admin Name: admin
New Password: password
Update Settings

Restore Factory Defaults

Restore all options to their factory default states
Restore Defaults
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**.