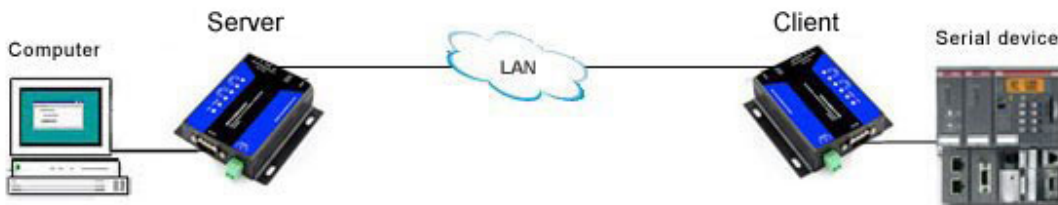


Tunneling mode over LAN setup using the US2000B Serial Ethernet Converter

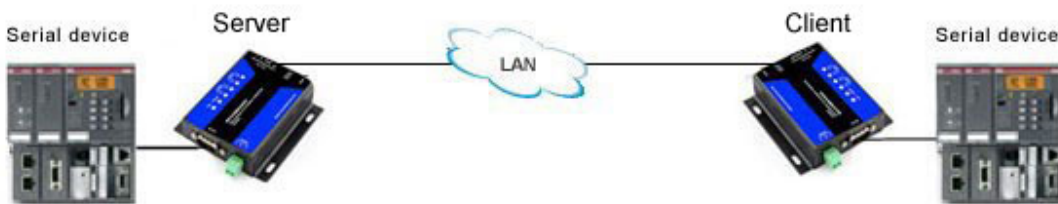
(also called peer-to-peer mode)

Serial tunneling allows you to establish a link between two serial device servers across an Ethernet network. The serial data is converted and packed into packets which can be transmitted over Ethernet and when it reaches the other serial device server the packets are converted back to serial data without any changes to the data structure. The following two examples are the most common setups for tunneling mode:

Serial tunneling between computer and serial device



Serial tunneling between two serial devices



One US2000B must be configured as a Server and the other as a Client.

Server settings:

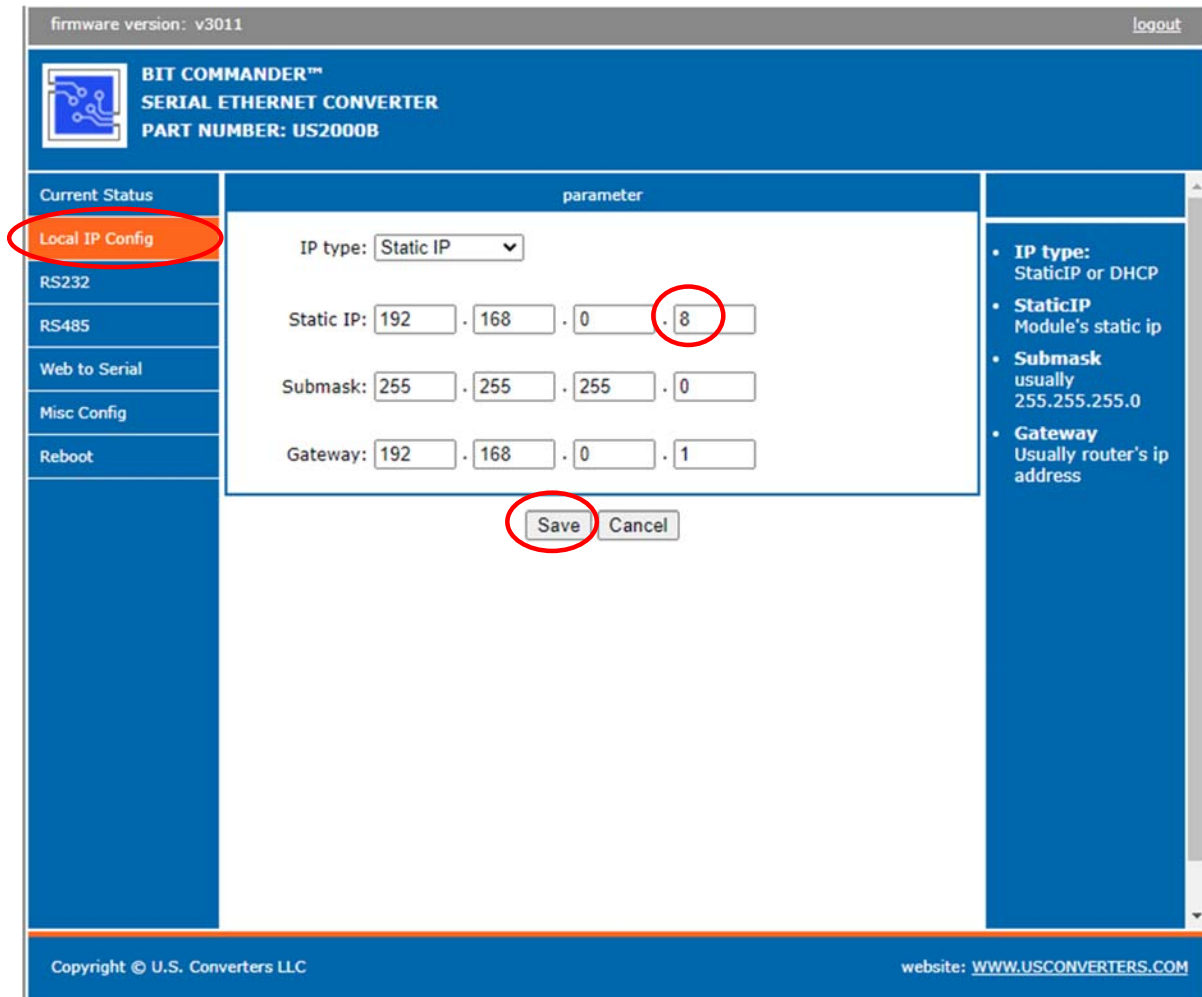
The US2000B comes configured as a server, so the US2000B you use as a server should have all default settings, with the exception of the serial port parameters such as baud rate, parity and stop bits which should match your serial devices settings.

Client settings:

The US2000B you use as a client should have the following settings.

Login to the US2000B and go to the “Local IP Config” page and change the IP address to something different from the Server unit, for example 192.168.0.8.

Click the “Save” button.



Click the "Reset Module" button on the next page. Login to the unit again by going to the new IP address, 192.168.0.8 in this example.

The screenshot shows the web interface for the BIT COMMANDER SERIAL ETHERNET CONVERTER. At the top, it displays the firmware version as v3011 and a 'logout' link. The main header identifies the device as BIT COMMANDER™ SERIAL ETHERNET CONVERTER with part number US2000B. A left sidebar contains navigation options: Current Status, Local IP Config (highlighted in orange), RS232, RS485, Web to Serial, Misc Config, and Reboot. The main content area is titled 'Reboot/Reset' and contains a 'Reboot/Reset Module' section with a 'Reset Module' button circled in red. A right sidebar titled 'help' contains a 'Reboot:' section with the instruction 'Click to make your config take effect'. The footer includes 'Copyright © U.S. Converters LLC' and the website 'WWW.USCONVERTERS.COM'.

Go to the "RS232" page and change the "Work mode" to "TCP Client" and enter the IP address of the Server unit, in this example 192.168.0.7.
Click the "Save" button.

The screenshot shows the configuration page for the BIT COMMANDER™ SERIAL ETHERNET CONVERTER (PART NUMBER: US2000B). The interface includes a sidebar with navigation options: Current Status, Local IP Config, RS232 (highlighted), RS485, Web to Serial, Misc Config, and Reboot. The main configuration area is titled 'parameter' and contains the following settings:

- Baud Rate: 115200 bps(600~230400)
- Data Size: 8 bit
- Parity: None
- Stop Bits: 1 bit
- Flow Control: None
- Local Port Number: 23
- Remote Port Number: 23
- Work Mode: TCP Client (selected)
- Remote Server Addr: 192.168.0.7 [N/A]
- Timeout: 0 seconds (< 256, 0 for no timeout)
- UART packet Time: 0 ms (< 256)
- UART packet length: 0 chars (<= 1460, 0 for no use)
- Sync Baudrate(RF2217 similar):

At the bottom of the configuration area, there are 'Save' and 'Cancel' buttons. A help sidebar on the right provides additional information:

- Baud:** From 600 to 230400bps(non-standard rates ok)
- Local port:** 1~65535.Random local port is used if set to 0 in TCP Client mode
- Remote port:** 1~65535
- Packet time:** 1-255ms. Default 10ms, if baud rate is <=4800bps set packet time to 50ms

The footer of the page contains the copyright information: Copyright © U.S. Converters LLC and the website URL: www.usconverters.com.

Click the “Reset Module” button on the next page.

The screenshot shows the web interface for the BIT COMMANDER SERIAL ETHERNET CONVERTER (PART NUMBER: US2000B). The interface includes a top navigation bar with 'firmware version: v3011' and a 'logout' link. A left sidebar contains menu items: 'Current Status', 'Local IP Config' (highlighted in orange), 'RS232', 'RS485', 'Web to Serial', 'Misc Config', and 'Reboot'. The main content area is titled 'Reboot/Reset' and contains a 'Reboot/Reset Module' section with a 'Reset Module' button circled in red. A right sidebar titled 'help' contains a 'Reboot' section with the text: 'Click to make your config take effect'. The footer contains 'Copyright © U.S. Converters LLC' and 'website: WWW.USCONVERTERS.COM'.

Serial data sent at one of the US2000B's will now appear at the other US2000B's serial port.