Configuration by the Telnet Console

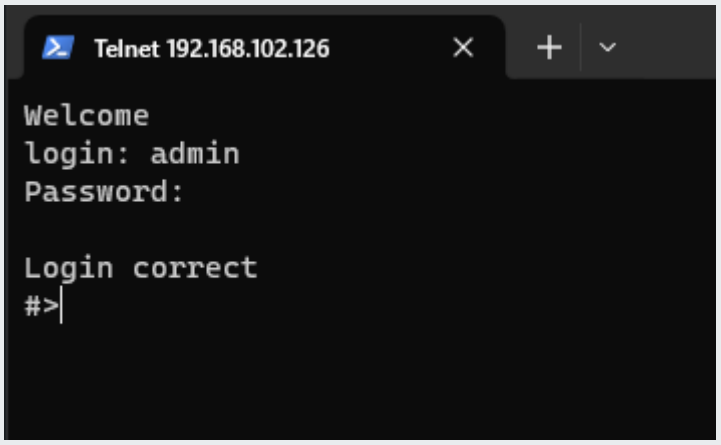
Serial Port Server w/ Wi-Fi® (C30 - C32)

The device can be also configured via the Telnet Console. Firstly, make sure that converter is connected to the power supply and to the LAN using a patch cord. Knowledge of the device's IP address (default is **192.168.100.100**) and Telnet port number (default is **23**) is necessary to establish a connection.

Use command below in a terminal window to connect to the device:

```
telnet <ip_address> <port_number>
```

If the connection is successful there will be a login prompt visible. Log in using user's personal credentials or the default login details (login: admin, password: admin123). If login is successful, it will be possible to start typing configuration commands.



> The configuration is available only if devices are connected to the same Local Area Network as the computer used for it.

List of all commands

Command	Description
help	Print the help.
conn	Print active TCP connections.
eth_mac	Print or change MAC address.
exit	Close current CLI session.
http_port	Print or change default http port.
ipconfig	Print or change the network configuration.
net_stat	Print lwIP statistics.
ping	Check internet connection with the desired host.
restart	Restart the system.
reboot	Same as restart.
sys_heap_usage	Print current heap usage.
telnet_port	Print or change default telnet port.
uart	Print or change uart configuration.
uart_service	Print or change uart_service configuration.
user	Print or change user configuration.
wificonf	Print or change the Wi-Fi configuration
wifi_mac	Print or change Wi-Fi MAC address.

Ports configuration commands

In terms of ports configuration it is possible to change parameters like: service, baud rate, data bits, parity, stop bits and so on. UART commands are provided below.

- **uart**
  - **uart help**
    Print the help message.

  - **uart list**
    List available uarts in the system.

    Example:
    uart list
    0: baud: 9600 bits: 8 stop_bits: 1 parity: none (service console)
    1: baud: 115200 bits: 8 stop_bits: 2 parity: odd (covered by cons.)
    2: baud: 9600 bits: 8 stop_bits: 1 parity: none

3: baud: 1200 bits: 8 stop_bits: 2 parity: even termination: ON (R-COM)
3: baud: 38400 bits: 8 stop_bits: 2 parity: none termination: OFF

- **uart PORT_NUMBER baud BAUD**
  Set PORT_NUMBER baudrate to BAUD. BAUD value can be one of the following: 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200.

  Example:
  uart 1 baud 9600

  WARNING: UART covered by console. Changes will take place after the reset.

- **uart PORT_NUMBER bits BITS**
  Set bit length to BITS. BITS value can be one only 8.

  Example:
  uart 2 bits 8

- **uart PORT_NUMBER stop_bits STOP_BITS**
  Set stop_bits length to STOP_BITS. STOP_BITS value can be only 1 or 2.

  Example:
  uart 2 stop_bits 1

- **uart PORT_NUMBER parity PARITY**
  Set uart parity to PARITY. PARITY value can be one of the following: none, odd, even.

  Example:
  uart 3 parity even

- **uart PORT_NUMBER termination STATE**
  Set uart termination to new STATE. STATE can be only ON or OFF.

  Example:
  uart 3 termination ON

- **uart_service**
  - **uart_service help**
    Print the help message.

  - **uart_service list**
    List of uarts services status.

    Example:
    uart_service list
    1 state: ON service: Remote COM port: 1504 enc: YES

2 state: OFF service: TCP Socket port: 1510
3 state: OFF service: UDP Socket port: 1510

- **uart_service UART_NUMBER state STATE**
  Set UART_NUMBER state to STATE. STATE value can be only ON or OFF.

  Example:
  uart_service 1 state ON

- **uart_service UART_NUMBER service SERVICE**
  Set UART_NUMBER service to SERVICE. SERVICE value can be one of the following: Remote COM, TCP Socket, UDP Socket.

  Example:
  uart_service 1 service TCP Socket

- **uart_service UART_NUMBER port PORT_NUMBER**
  Set UART_NUMBER port to PORT_NUMBER. PORT_NUMBER value can be any in the range: 1-65535.

  Example:
  uart_service 1 port 1501

- **uart_service UART_NUMBER enc ENC_STATE**
  Set UART_NUMBER encryption to ENC_STATE. ENC_STATE can be only YES or NO.

  Example:
  uart_service 1 enc YES

  If ENC_STATE is YES then it will ask for a new password for encryption.

Network settings

The following commands might be helpful to change network settings according to target LAN parameters.

- **ipconfig**
  - **ipconfig addr ADDRESS**
    Set IP address to ADDRESS.

    Example:
    ipconfig addr 192.168.0.10

- **ipconfig mask NETMASK**
  Set subnet mask to NETMASK (in dot-decimal format).

  Example:
  ipconfig mask 255.255.255.0

- **ipconfig mask BIT_COUNT**
  Set subnet mask to BIT_COUNT bits.

  Example:
  ipconfig mask 24

- **ipconfig gateway GATEWAY_IP**
  Set network gateway to GATEWAY_IP.

  Example:
  ipconfig gateway 192.168.0.1

- **ipconfig dhcp enable/disable**
  Enable or disable DHCP client.

  Example:
  ipconfig dhcp enable

- **ipconfig dns1 ADDRESS**
  Set primary DNS to ADDRESS, disable getting DNS from DHCP if enabled.

  Example:
  ipconfig dns1 192.168.100.1

- **ipconfig dns2 ADDRESS**
  Set secondary DNS to ADDRESS, disable getting DNS from DHCP if enabled.

  Example:
  ipconfig dns2 1.1.1.1

- **ipconfig -w**
  Show information about Wi-Fi connection

- **eth_mac**
  - **eth_mac help**
    Print the help message.

  - **eth_mac default**
    Set device’s MAC address to factory-default one.

- **eth_mac set MAC_ADDR**
  Set device's MAC address to MAC_ADDR. Accepts both dash and colon-separated formats.

  Example:
  eth_mac set 01-02-03-04-05-06

  Example:
  eth_mac set 01:02:03:04:05:06

- **http_port**
  - **http_port help**
    Print the help message.

  - **http_port PORT_NUMBER**
    Set http port to PORT_NUMBER. A PORT_NUMBER value must be in range: 1-65535.

    Example:
    http_port 80

  - **http_port status**
    Print current http port.

    Example:
    http_port status
    A current http port is 80

- **telnet_port**
  - **telnet_port help**
    Print the help message.

  - **telnet_port PORT_NUMBER**
    Set Telnet port to PORT_NUMBER. A PORT_NUMBER value must be in range: 1-65535.

    Example:
    telnet_port 23

  - **telnet_port status**
    Print current Telnet port.

    Example:
    telnet_port status
    A current telnet port is 23

- **wificonf**

    - **wificonf help**
      Print the help message
    - **wificonf ssid SSID**
      Type SSID of target access point

      Example:
      wificonf ssid SSID

    - **wificonf password PASSWORD**
      Type password of target AP.

      Example:
      wificonf password PASSWORD

    - **wificonf connect**
      Try to connect to the configured Access Point. A result of the connection can be checked by '**wificonf status**'.

    - **wificonf disconnect**
      Disconnect from the AP.
    - **wificonf status**
      Show the current connection status.

    - **wificonf scan**
      Scan Wi-Fi networks.

- **wifi_mac**
    - **wifi_mac help**
      Print the help message
    - **wifi_mac default**
      Set device's MAC address to factory-default one.

    - **wifi_mac set MAC_ADDR**
      Set device's MAC address to MAC_ADDR. Accepts both dash- and colon-separated formats.

      Example:
      wifi_mac set 01-02-03-04-05-06

    - without any parameter print current MAC state

Changing username or password

To change username or password, use user command. Available commands:

- **user help**
  Print the help message.

- **user mod_name USER_NAME NEW_NAME**
  Change the user name to NEW_NAME. It fails if the name is used by another user.

  Example:
  user mod_name admin john

- **user passwd USER_NAME**
  Change USER_NAME's password.

  Example:
  user passwd admin
  ****** <- here is entered password, but '*' appears instead

  Note: Everyone can change the password for themselves.

Additional notes

After some time of inactivity, session will be disconnected automatically.

In order to avoid issues like connecting to the host, type “help” to get more information.

To get more details about every particular command, append “help” after each commands (example: "ipconfig help").

Factory reset is not available from the Telnet Console level.

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