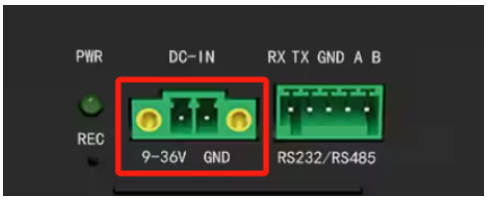
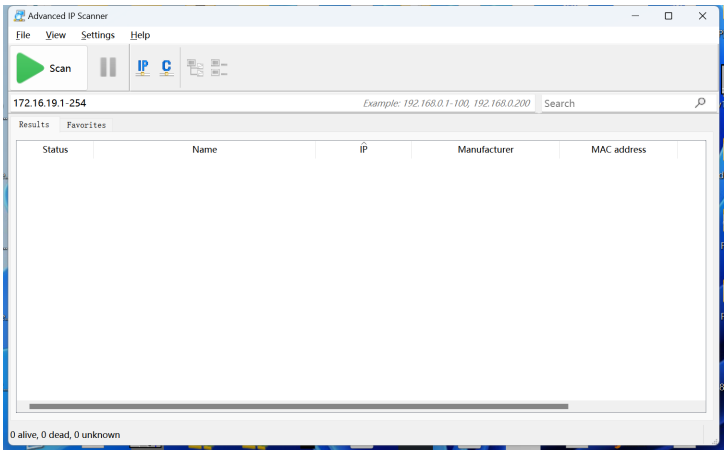
TM-CP1B Operation Guide

- Connect the power and plug in the network cable
    - The power supply range is 9V-36V, with the positive terminal near the LED end.
      Note: Incorrect polarity can cause damage to the machine.



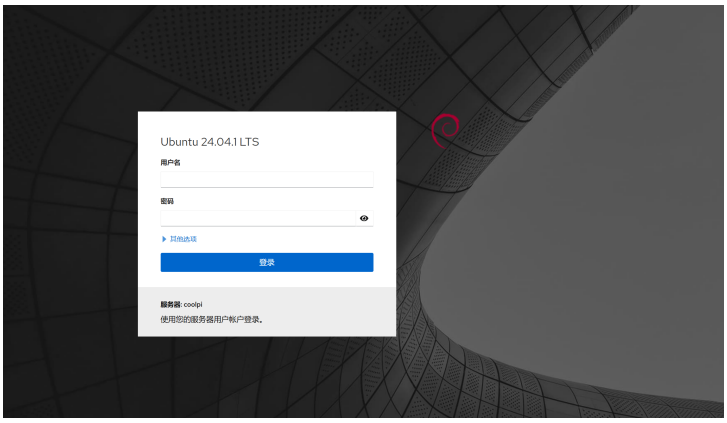
    - The default network connection method of the machine is DHCP to automatically obtain an IP address.
      After the network is connected normally, the two indicator lights on the network port will light up simultaneously.
- Obtain the IP address of the machine
    - Use LAN IP address scanning software Advanced_IP_Scanner to obtain all scanned LAN IP addresses.
    - After downloading and installing the software, open the software and you will see the following interface. Click Scan to start scanning.



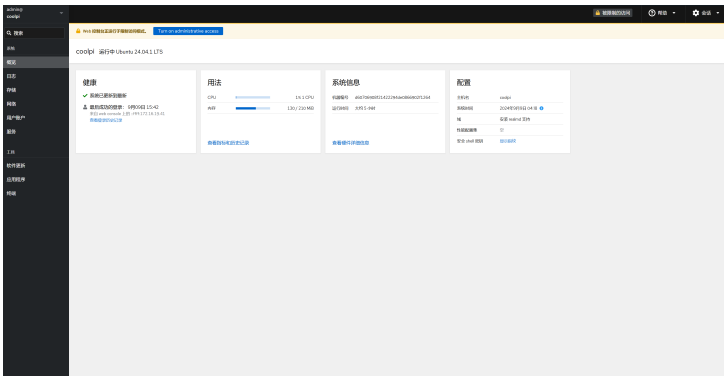
- The machine with the device name coolpi in the scanning results corresponds to the DHCP address of the machine.

- Login device
  - Enter the following link in the browser to enter the login interface: https://your_ip_address:9090/

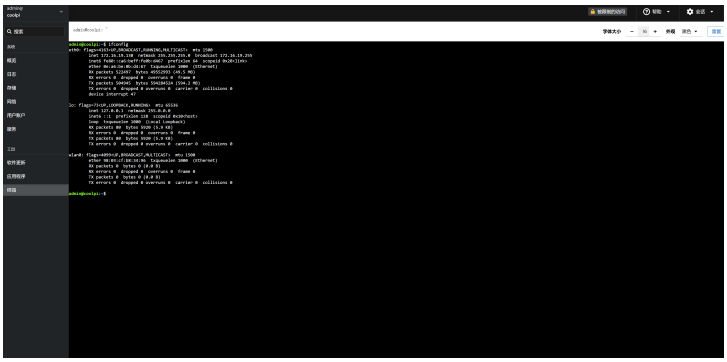
    Replace 'your_ipaddress' with the actual IP address of the machine.



  - Enter your username and password, then click login.
    The default username for the machine is admin, and the password is admin.



  - Click on the terminal to enter the shell interface, where you can update various devices of the system or operating system.



- Interface operation
  - The correspondence between ttySx device nodes and interfaces.

    ttyS0 -- LORA

    ttyS1 -- RS485

    ttyS4 -- RS232

    ttyUSB0-ttyUSB3 -- 4G-LTE

  - RS485&RS232

    ```
    stty -F /dev/ttyS1 raw speed 115200 //Configure RS485 baud rate to
    115200
    echo "hello world" > /dev/ttyS1     //Send "hello world" to RS485 port
    ```

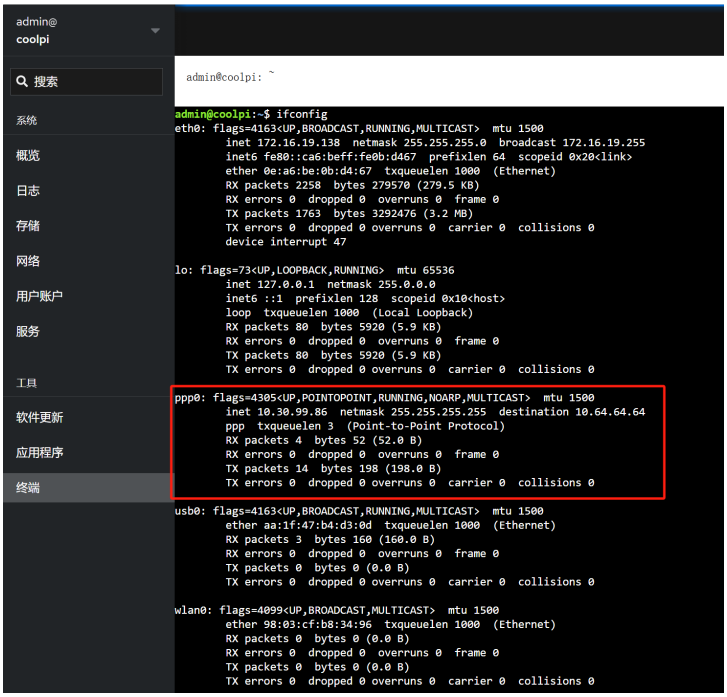
    You can also operate the serial port through C or Python.

  - 4G-LTE

    After inserting the 4G module and SIM card, the machine will automatically complete the dialing operation after booting up.

    After successful dialing, the system will display the following ppp0 network nodes.

    The default 4G-LET module model currently used is EC20.



- WIFI

  The default WIFI module model used by the machine is BL-R7601MU5, which uses the MT7601U chip.
  The system has already integrated drivers and firmware by default, and can be used by plugging in the module.

- LORA(To be updated)

- Common problems and solutions

  - How to change default password ?

    ```
    usermod -p $(openssl passwd -1 123) admin //Change the admin password to 123
    ```

  - How to add a new user? As shown in the following figure, new users can be added and permissions can be configured through the backend management software.