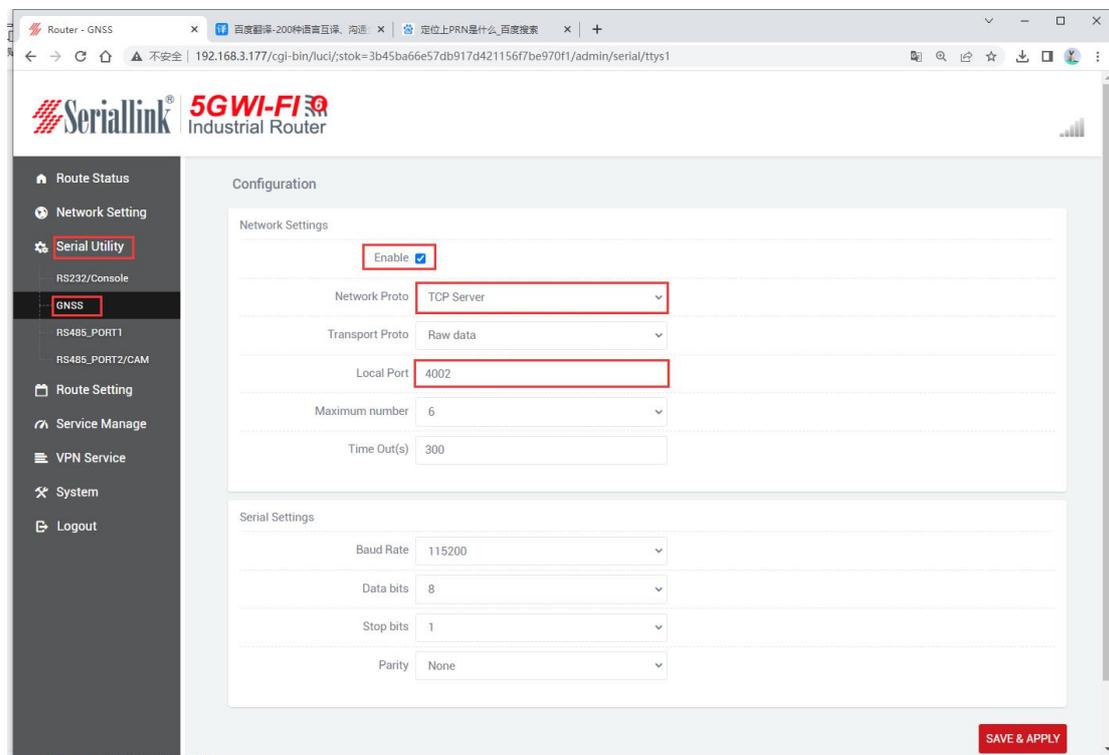


# GPS User Manual

## 1 Set GNSS

Select "Serial Utility">>>"GNSS" in sequence. Here, the network protocol is TCP Server, and the data type is selected according to needs. Generally, Raw data is chosen. After setting the local port, remember to use the IP address and port number of the serial port server when establishing a TCP connection. Use the serial port configuration bar to configure the baud rate, data bits, stop bits, and check bits of the serial port according to your own needs. After the configuration is completed, click Save and Apply.



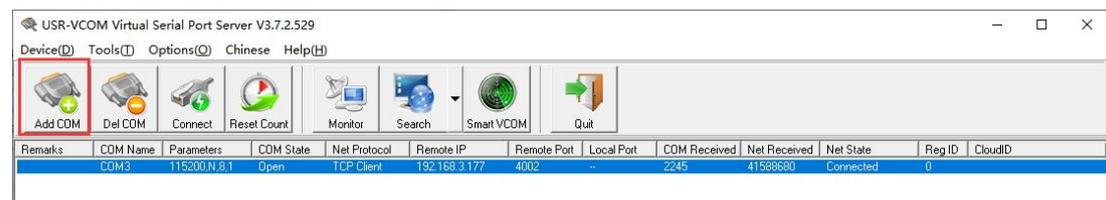
Maximum number of connections: The default is 6, which means that it supports up to 6 TCP clients to connect to the same serial port.

Timeout (seconds): The default is 300, which means that after the TCP server establishes a connection and there is no data, the connection is disconnected after 300 seconds. If a permanent online connection is required, the value can be set to 0.

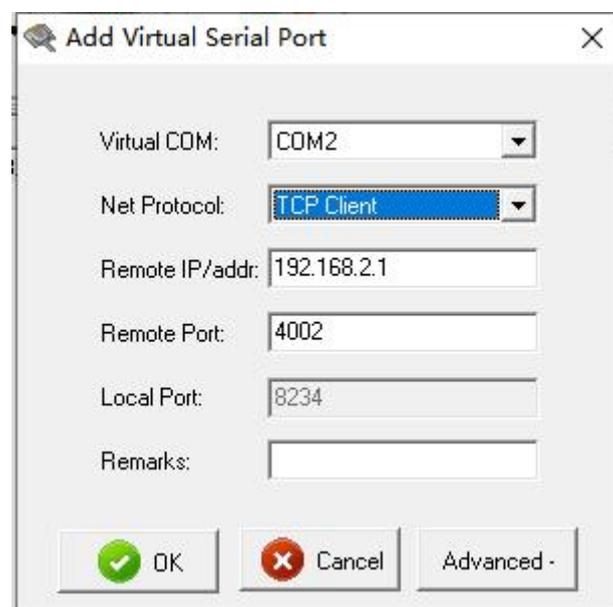
## 2 Using tools and preparation

Select "Serial Utility">"GNSS" and configure a port according to your own needs. A virtual serial port tool (using USB-VCOM as an example) is required to virtualize the port on the device into a com port on the computer. Enter the USB-VCOM software.

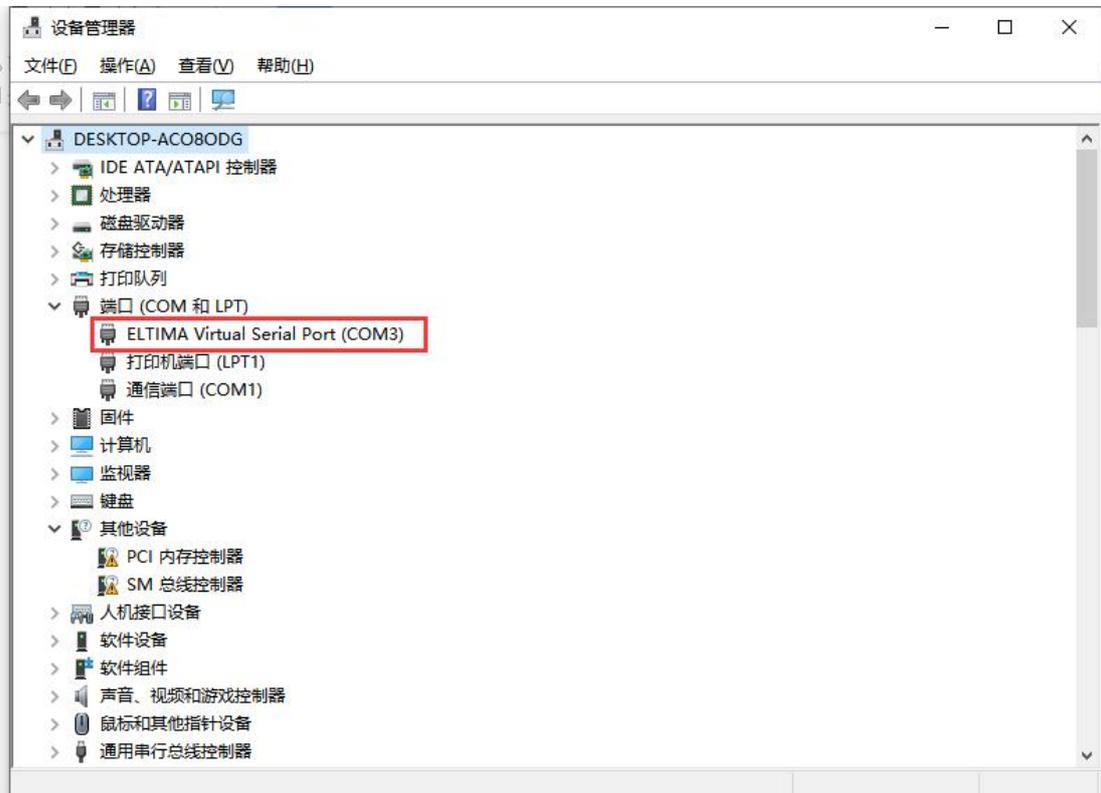
Click to add



- ① Select a virtual serial port (COM).
- ② The network protocol is set according to the device configuration page, TCP server - TCP Clientn (software)(Device) TCP Client TCP Server (Software), (Device) UDP UDP (Software).
- ③ Fill in the IP address of the router for the target IP/domain name (192.168.2.1).
- ④ Fill in the local port set in the router's "Serial Utility">"GNSS" for the target port (default 4002).
- ⑤ Click OK to virtual the port to the computer's com port.



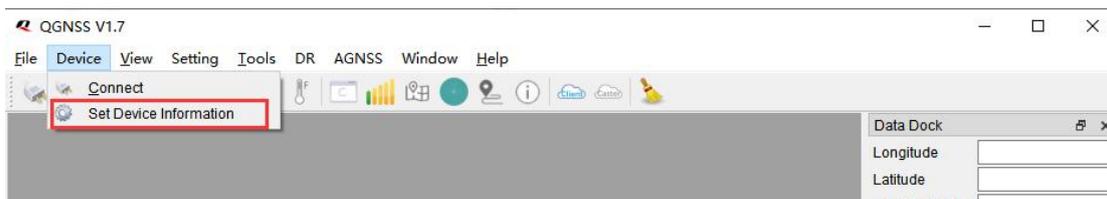
After the virtualization is completed, open the Device Manager on the computer and check whether the virtual port in "Port (COM and LPT)" is successful.



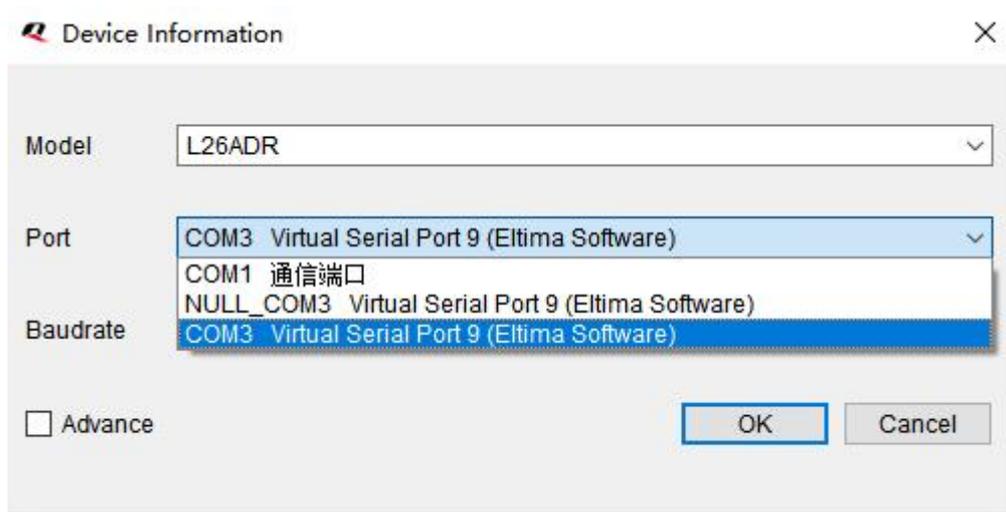
## 3 Usage and viewing of GPS tools

### 3.1 Connecting devices

① Open the QGNSS software, click on Device, and select Set Device Information.

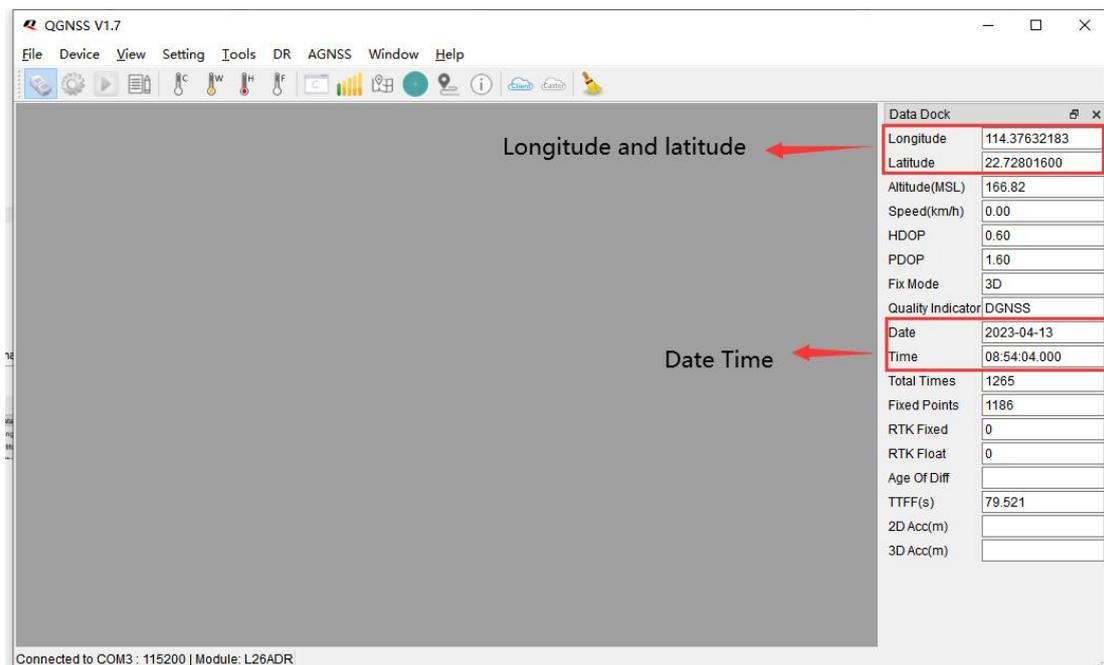


② In Device Information, select the corresponding port based on the virtual COM port of USB-VCOM, and click OK to connect



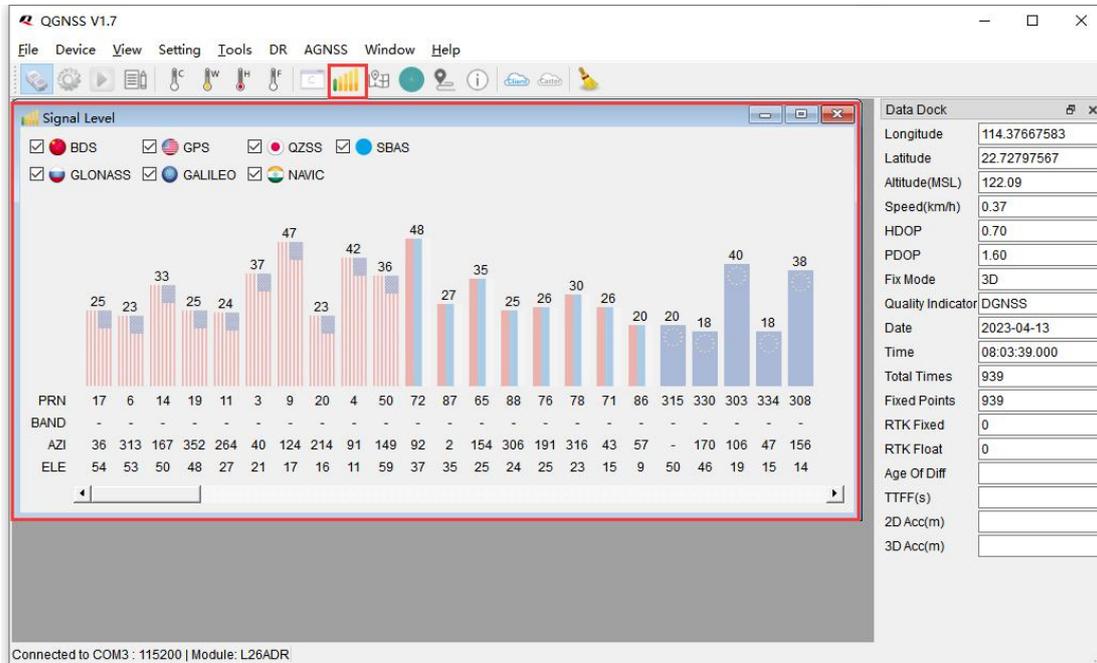
### 3.2 Viewing longitude and latitude

After successful connection, the Data Dock will display data such as the longitude, latitude, and date time of the device.



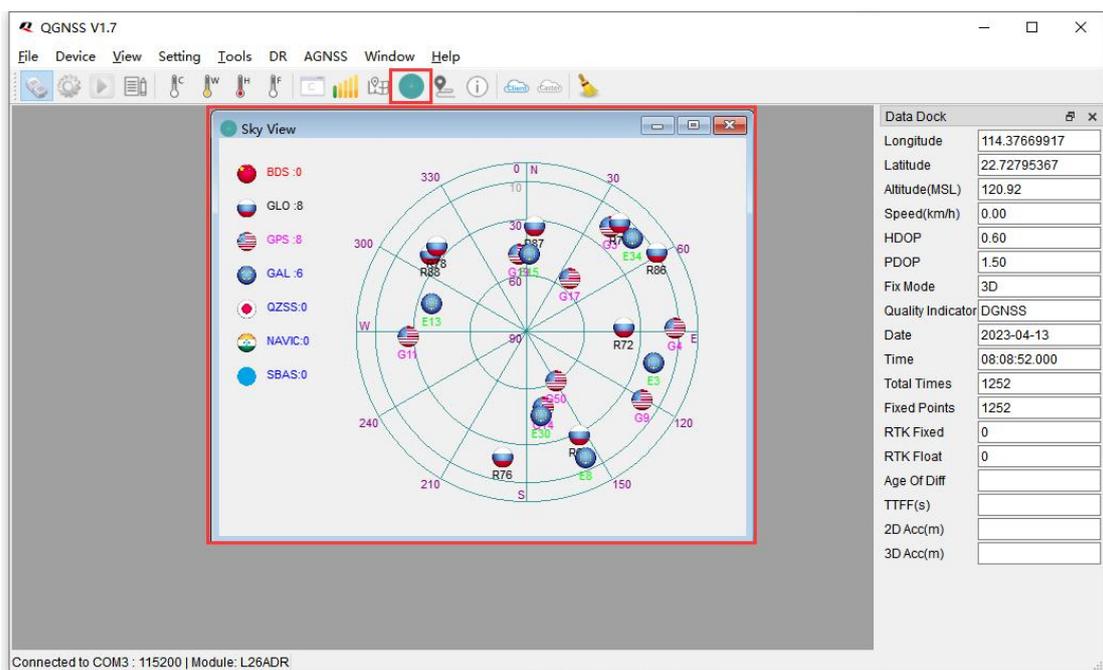
### 3.3 GNSS Satellite signal

Clicking on the GNSS signal window button will display the following interface. The number displayed above each flag is the C/No value. The information displayed below includes PRN, frequency band used by the satellite ("band"), azimuth ("AZI"), and satellite elevation ("ELE"). The more satellites there are, the more accurate the positioning data is.



### 3.4 Sky View

After clicking the button, the 'Satellite View' will open, displaying the azimuth and elevation angles of the currently fixed satellites.



### 3.4 Online Map

Clicking on the electronic map button will display the map of the area where the device is located and its location. The area map can be zoomed in and out to see its exact location.

