

WisLTE With Hologram.io V1.0

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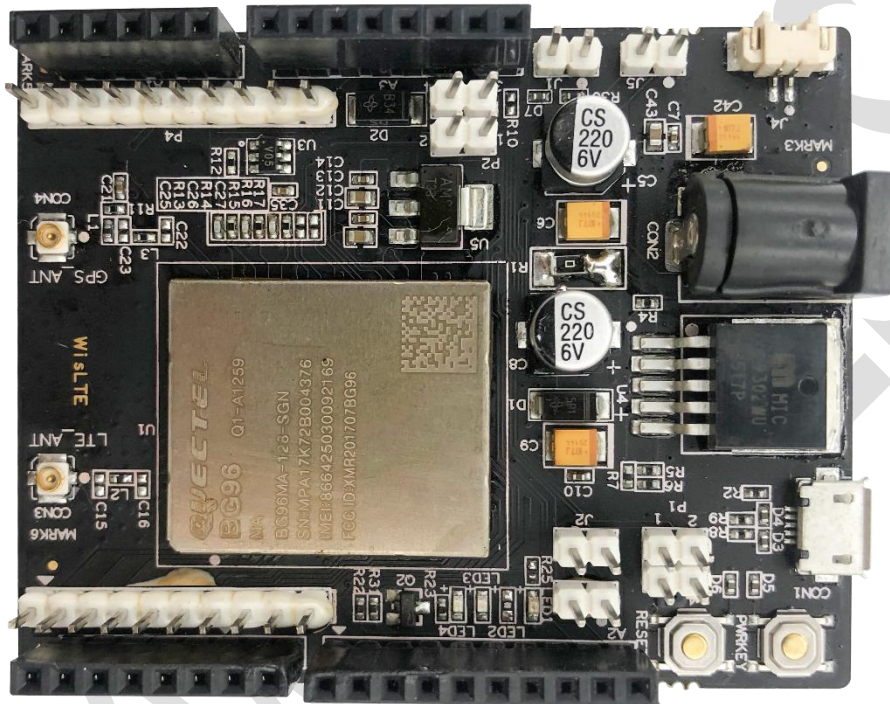
After update the new version, this document without prior notice.

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1. Required materials(hardware,tools)

- WisLTE x1
- Hologram SIM Card x1
- PC x1



2. Introduction

This document mainly describes how to use WisLTE development board to connect to Hologram.io. The premise is that users need to know how to use WisLTE AT commands. If there are users who do not know how to send AT commands to control WisLTE. Please check the documentation: [WisLTE Quick Start Guide](#)

The main contents of this document include:

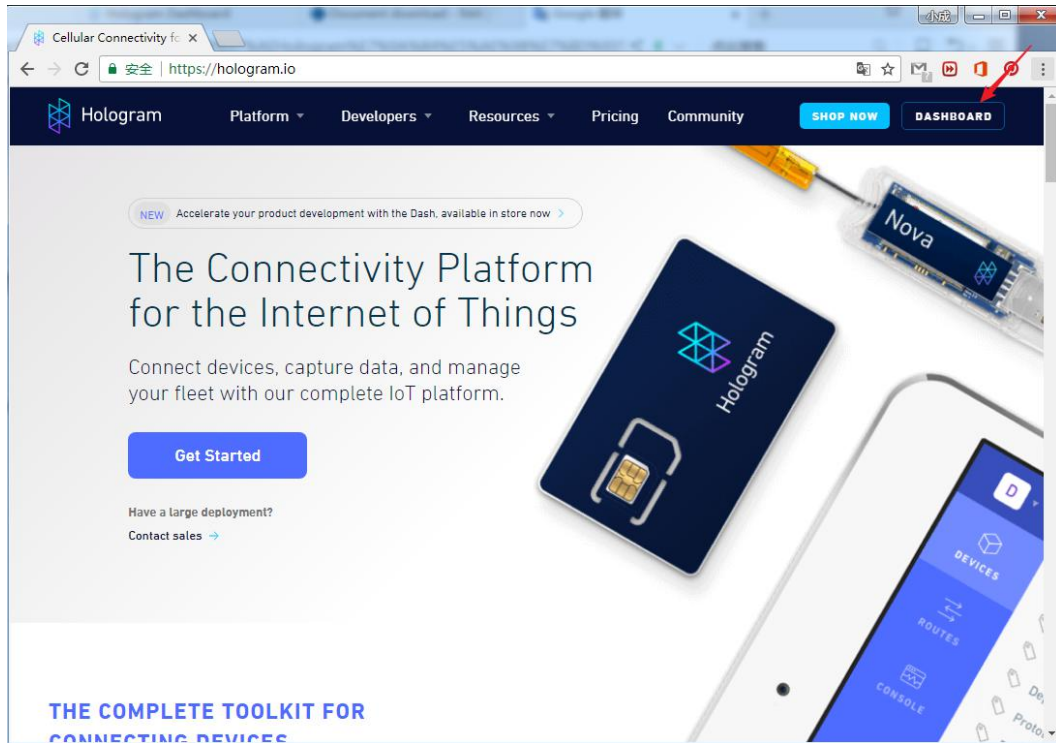
1. How to register for Hologram?
2. How to activate the Hologram SIM card?
3. How to use WisLTE to send data to the Hologram server?
4. How to use WisLTE to receive data from the Hologram server?

3. Registration Hologram.io

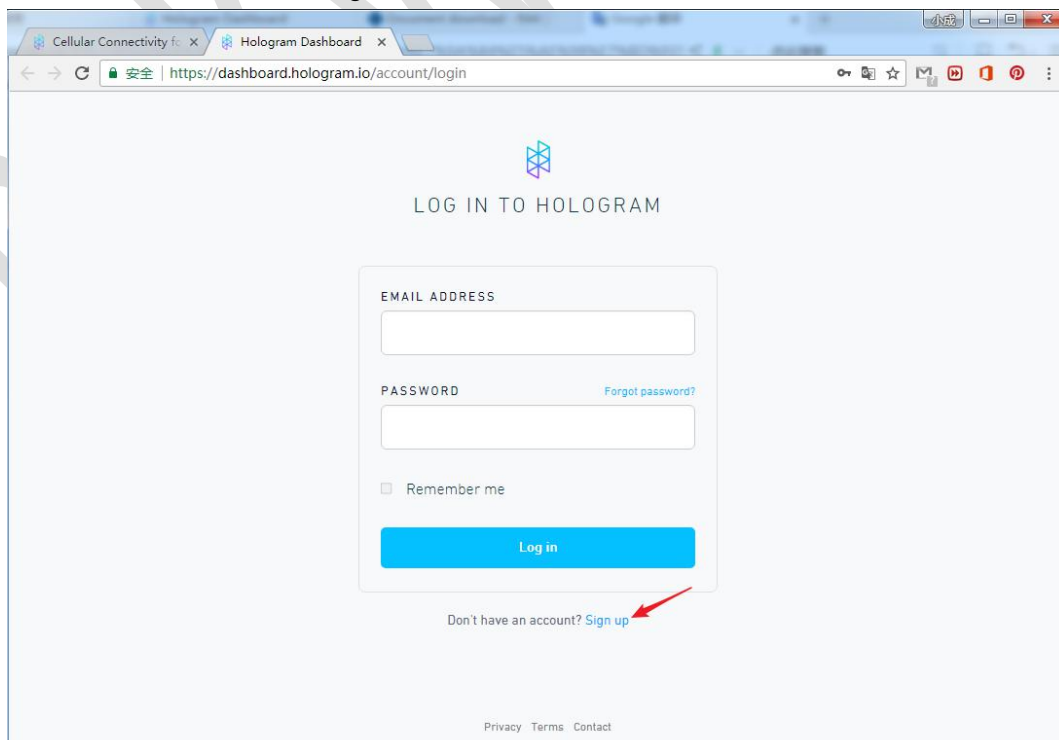
Hologram is the Connectivity Platform for the Internet of Things. You can connect devices, capture data, and manage your fleet through their complete IoT platform. Here is their official website:

<https://hologram.io/>

Visit the official website of Hologram. Click on "DASHBOARD" in the upper right corner.

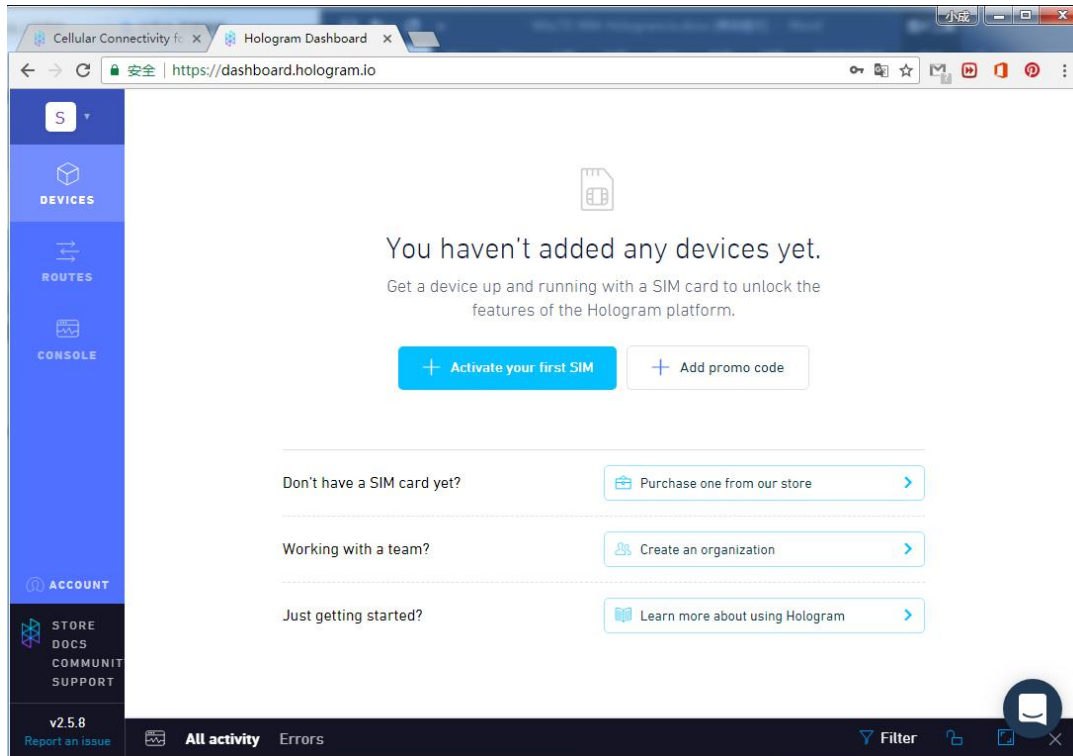


Then click on "sign up" at the bottom of the page. Enter the registration interface. Follow the prompts to fill in the information to register.

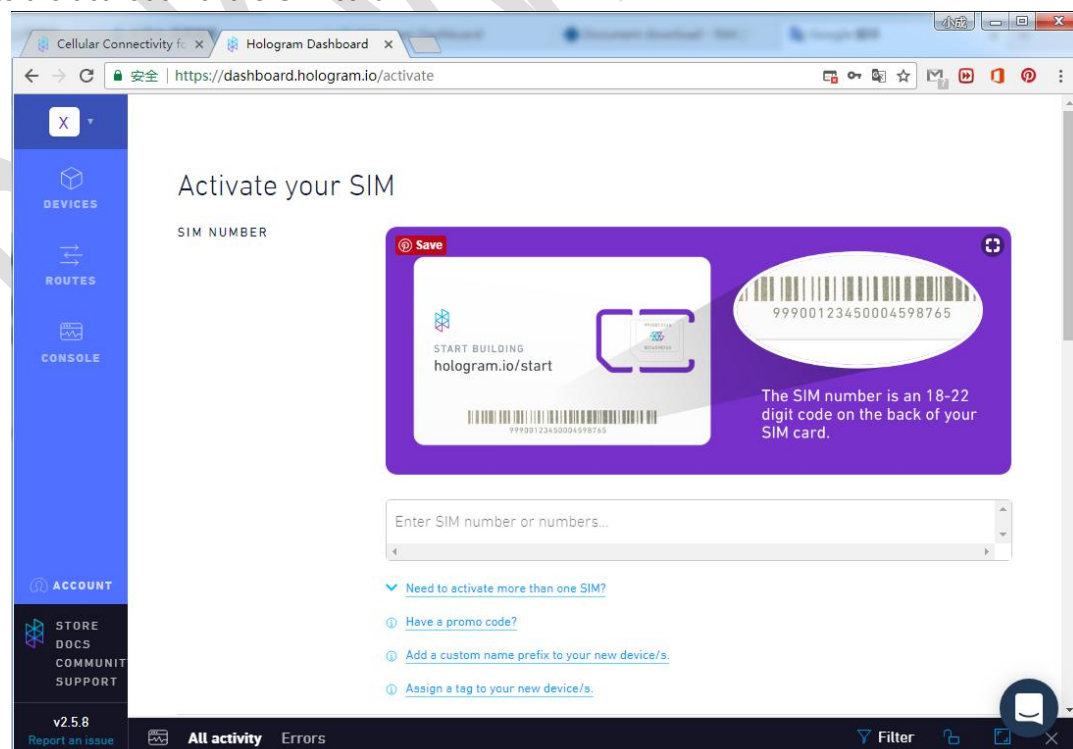


4. Activate SIM card

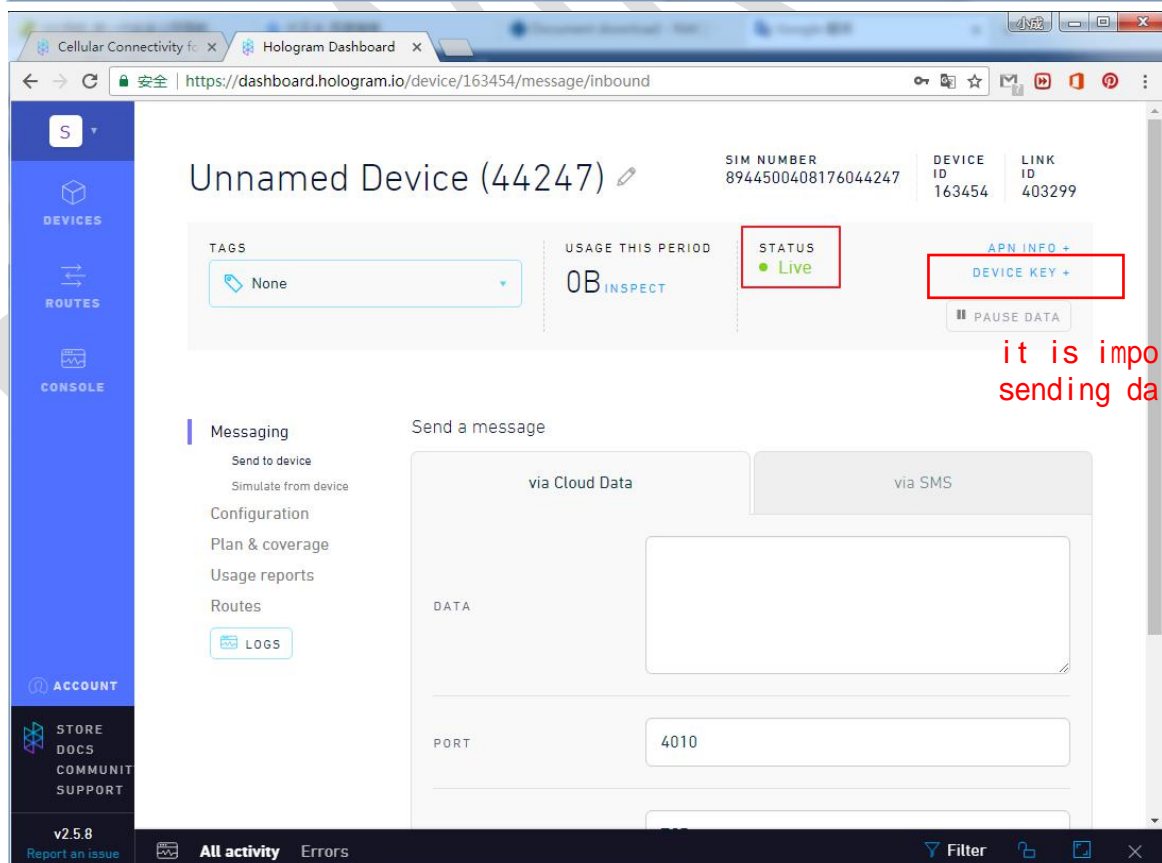
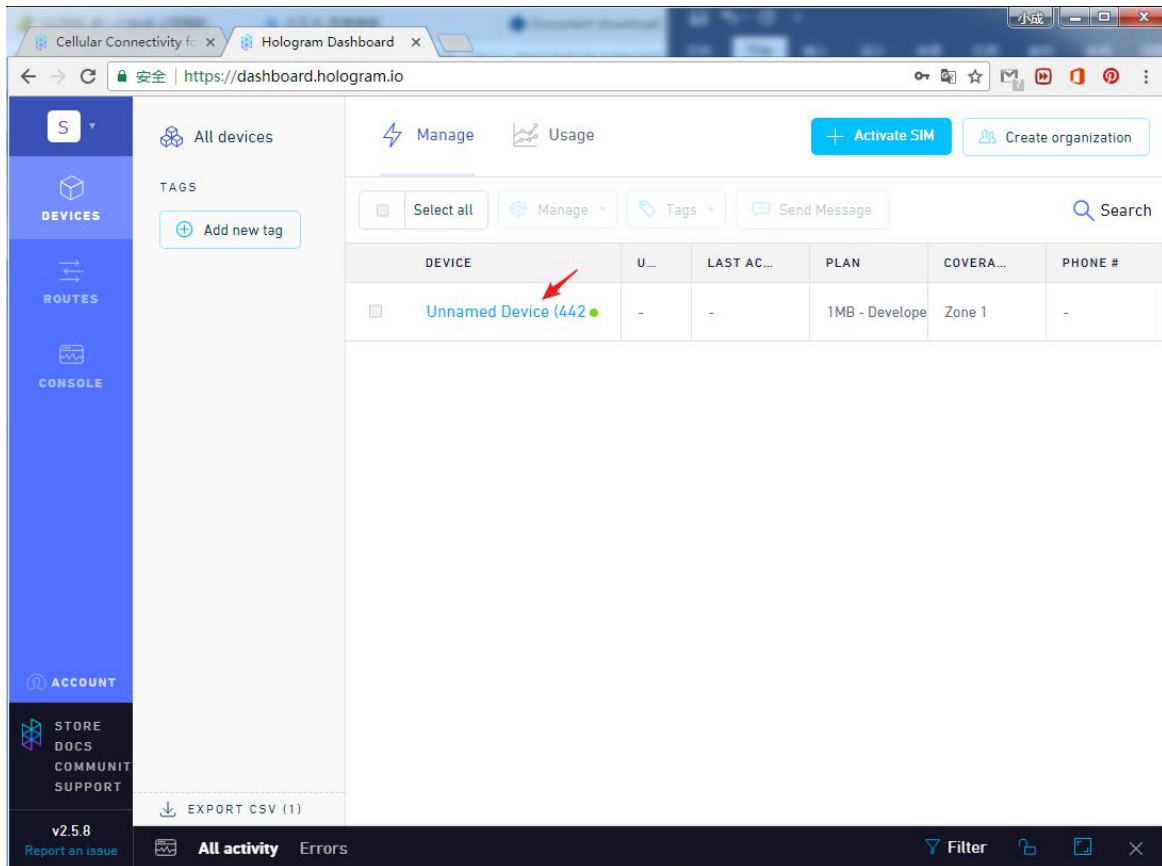
After successful registration, log into your Hologram account and enter your Dashboard interface. Next you need to activate your purchased Hologram SIM card. Click on "Activate your first SIM" in the upper right.



Enter the activation interface, according to the given prompts, fill in the information, you can complete the activation of the SIM card.



After successful registration, enter the SIM card information interface. After waiting for a period of time, you will see the “Live” status.



it is important when sending data

5. Send Data

Insert the SIM card into the WisLTE slot, and then connect the WisLTE device to the computer through the connection cable. (Please note that the LTE antenna needs to be connected)

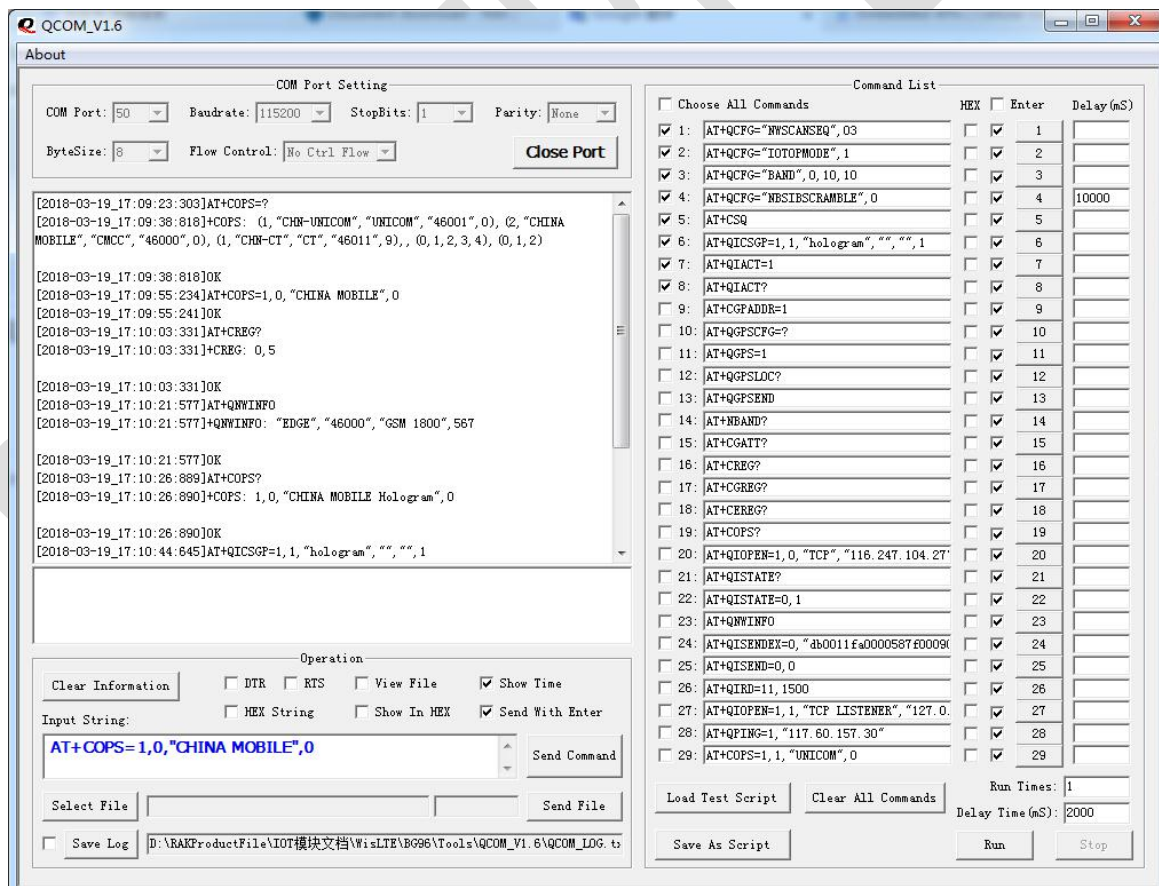
Find the port number of the AT Port and use the QCOM serial port tool to connect. Then send the following AT command. (For AT command details, see the [AT command manual](#))

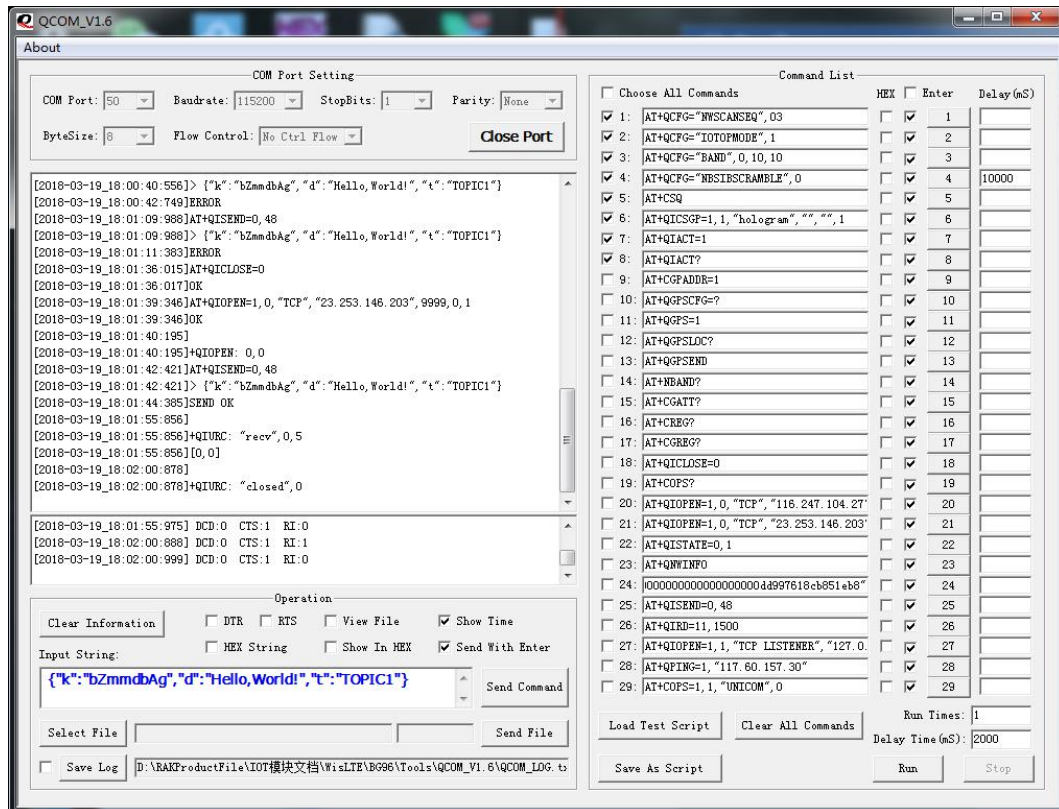
```
AT+COPS=? // Find nearby network information
AT+COPS=1,0,"CHINA MOBILE",0 // Manually set up a connected network
AT+CREG? // Check whether the device is registered on the network
AT+QNWINFO // Query connected network information
AT+COPS? // Query the connected web server information
AT+QICSGP=1,1,"hologram","",1 // Set APN network to hologram
AT+QIACT=1 // Activate the APN network
AT+QIAC? // Query the APN assigned IP address
AT+QIOPEN=1,0,"TCP","23.253.146.203",9999,0,1 // Create a TCP, connection hologram test server
AT+QISEND=0,48 // Send data, send data length is 48
{"k":"oZmmdAg","d":"Hello,World!","t":"TOPIC1"} //Send Packets.The data format is a hologram-defined
format. (For details, please see: https://hologram.io/docs/reference/cloud/embedded/)
AT+QISEND=0,0 // Query data is sent successfully
```

connect to your operator net

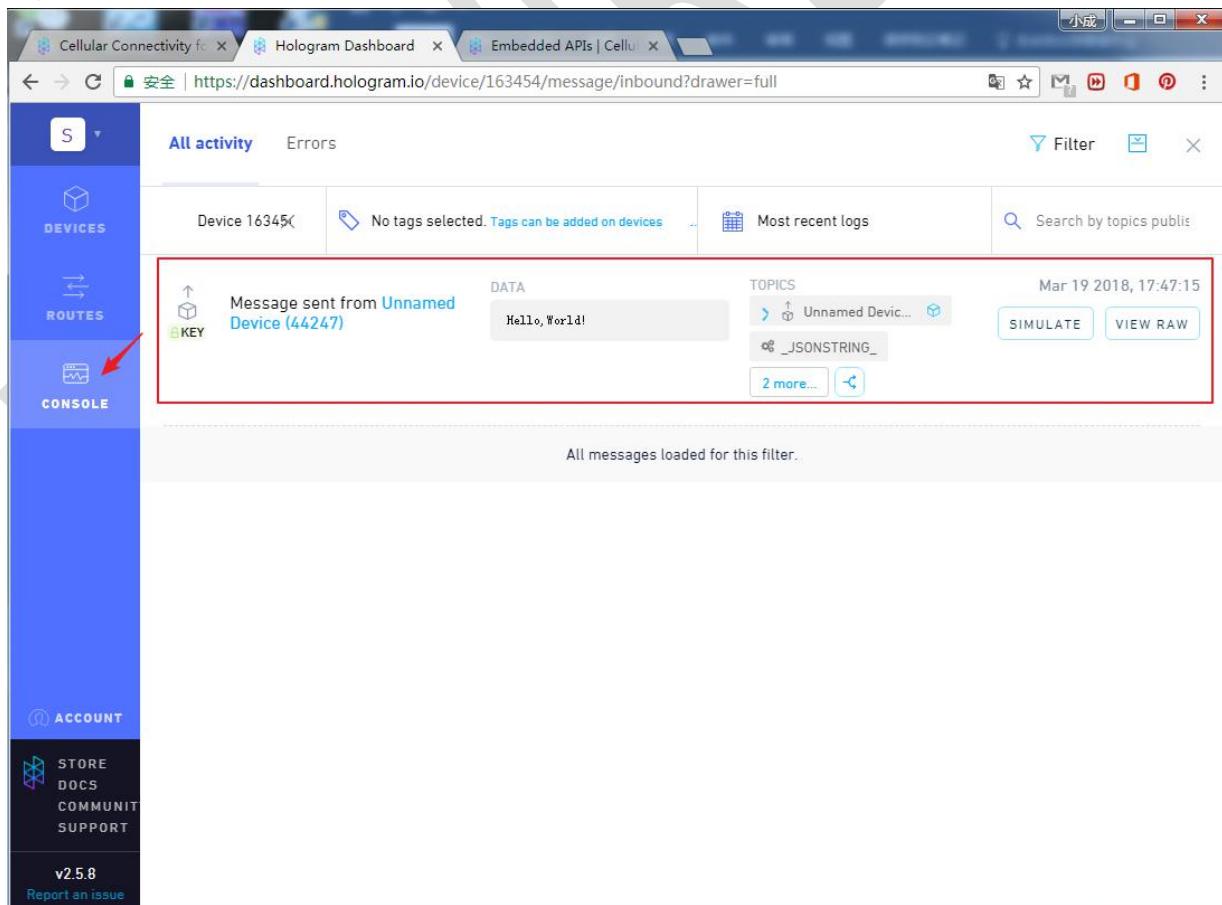
<https://hologram.io/docs/reference/cloud/embedded/>

here is
your card
device key
above





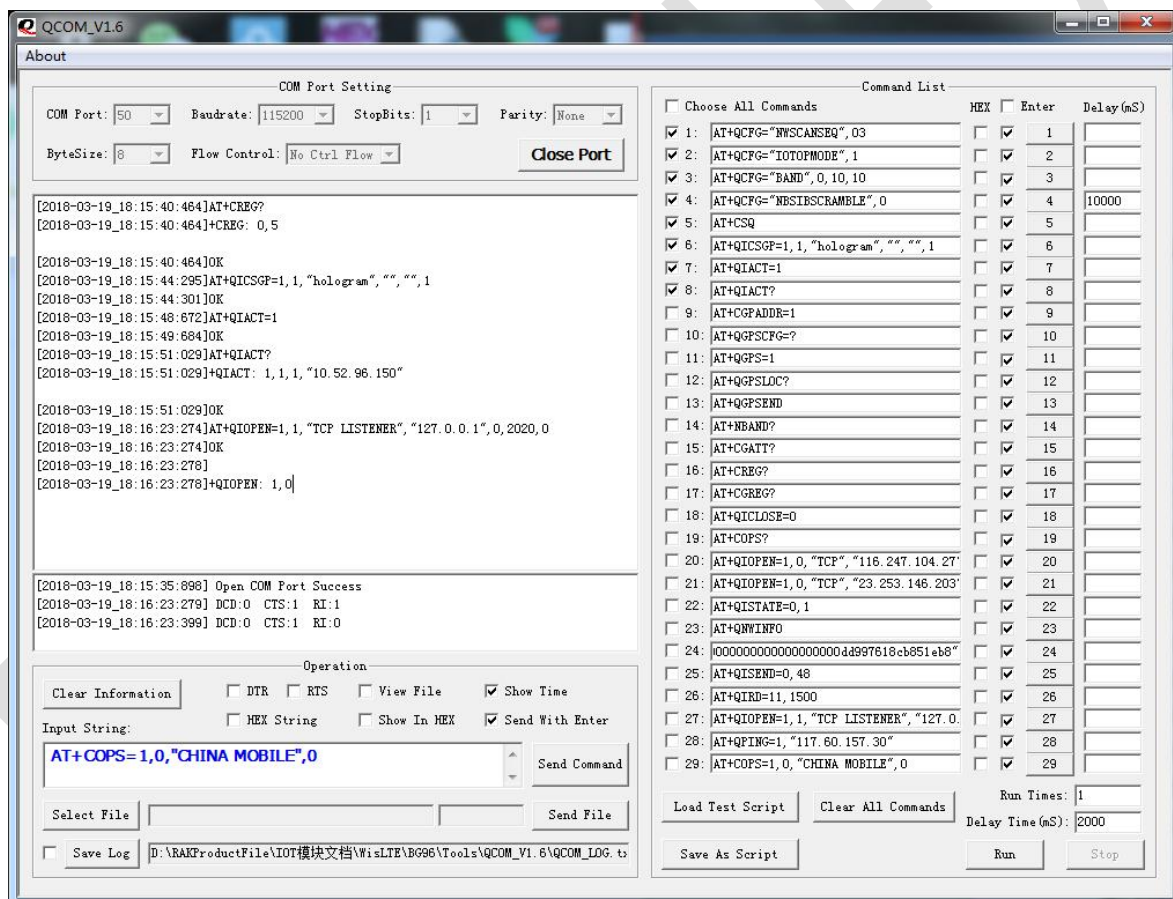
After the device is sent successfully, you can see the sent information on your interface of the Hologram Dashboard



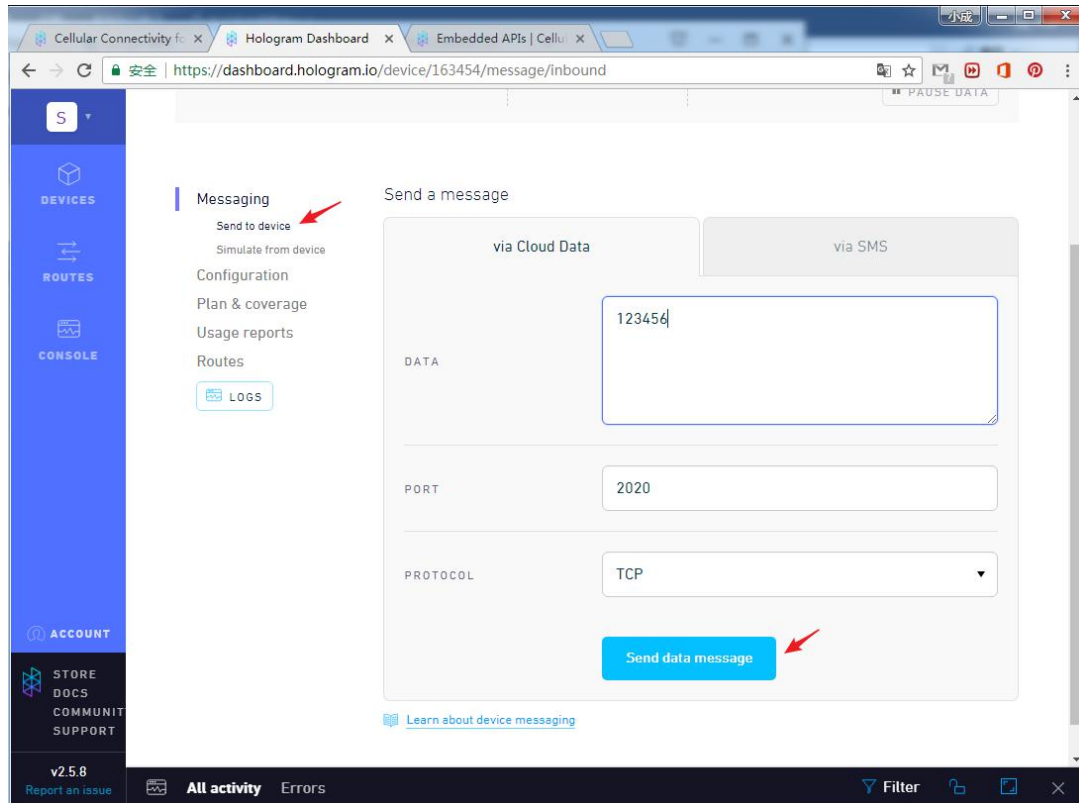
6. Receive Data

Receiving data is similar to sending data, except that the established socket is different. The receiving data is established as a TCP server. The AT commands sent are shown below:

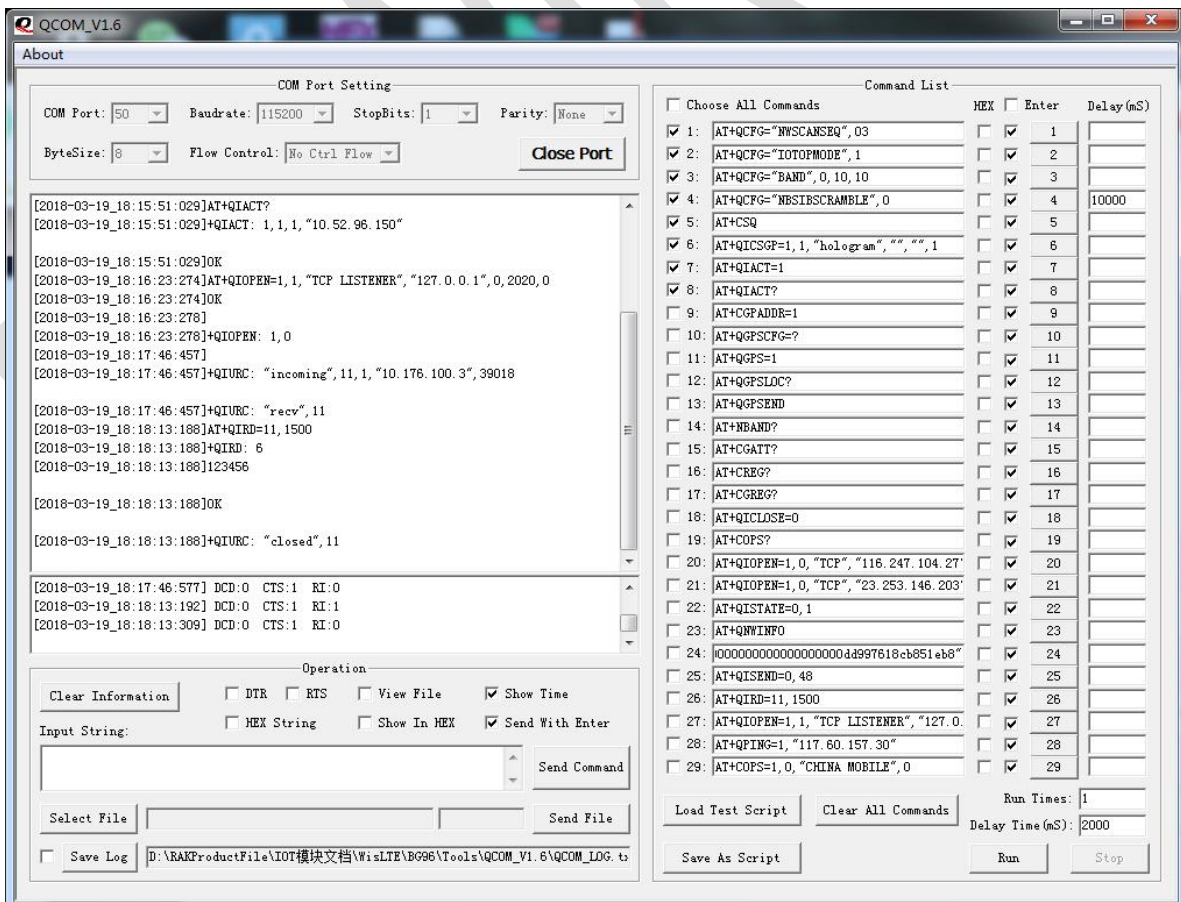
```
AT+COPS=? // Find nearby network information
AT+COPS=1,0,"CHINA MOBILE",0 // Manually set up a connected network
AT+CREG? // Check whether the device is registered on the network
AT+QNWINFO // Query connected network information
AT+COPS? // Query the connected web server information
AT+QICSGP=1,1,"hologram","", "",1 // Set APN network to hologram
AT+QIACT=1 // Activate the APN network
AT+QIACT? // Query the APN assigned IP address
AT+QIOPEN=1,1,"TCP LISTENER","127.0.0.1",0,2020,0 // Create a TCP server, use local IP, port 2020
AT+QIRD=11,1500 // Read the received data, 11 is the returned Socket identifier
```



After creating a successful TCP server, the user needs to return to the Hologram Dashboard interface, click on the "send to device" button, and then fill in the data to be sent. PORT is the TCP server port of the device. Fill in and click "Send data message".



After the Hologram Dashboard is sent, the device will receive a message of "recv, 11" indicating that the device received the data. At this time, the AT+QIRD=11,1500 command is sent to obtain the received data.



7. Contact information

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8. Change Note

Version	Author	Data	Modify content
V1.0	Chace	2018/03/19	Create Document

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