

1. LoRa Static frequency communication between nodes

Set up frequency as 470.4Mhz(<u>AT+FREQ=47040000</u>), note that the frequency values request to follow the specifications, Unit is Hz, LoRa modules with different frequencies can not communicate.

Set the air rate level, <u>AT+RATE=8</u>. rate rating range :0~9. Lora modules with different rate levels can not communicate.

Sender:

Set target node address, <u>AT+TADDR=124</u>, Set Local Node Address, <u>AT+ADDR=100</u> Receiver:

Set target node address, <u>AT+TADDR=100</u>, Set Local Node Address, <u>AT+ADDR=124</u>

Note: The target node address should be consistent with the local node address of thereceiver

Before node module send Lora data package, first to set the receiver parameters of the LoRa node module, frequency and rate levels need to be consistent with the sending node, and to set the local node address, first turn on Lora receiving mode (<u>AT+RECV=1</u>), sender to send message (<u>AT+MSG=ABEWER</u> or <u>AT+ACKMSG=ASDFGH</u>).

2. LoRa hopping communication between nodes

Both sender and receiver set commands: <u>AT+FHSS=50</u>, the range of values is greater than 30.

Other settings and static frequency communication are same.

3. Ultra Low Power LoRa Receiving Mode

CAD channel detection instead of direct access to receiving mode, receiving mode can save electricity. Set the CAD detection interval time: <u>AT+CSLT=300</u>, the values unit is milliseconds. A CAD detection of 300 milliseconds, the greater the detection interval, the more power saving. The value is recommended not to exceed 3000 milliseconds. Similarly, the sender needs to set the command.

And go to CAD receive mode: AT+RECV=2.

Other settings are the same as static frequency communication.