WisPLC PRO

Quick Start Guide

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1、Product introduction

WisPLC PRO is a new type of data transmission based on OFDM (Orthogonal Frequency Division Multiplexing) orthogonal frequency division multiplexing modulation technology。Maximum transmission rate of power lines can reach 500Mbps， Standard Ethernet port，Twisted pair interface。

Support AES 128-bit encryption，Occupied 2-72MHz band communication，No impact on existing CATV signals or cable broadcasting。No user configuration, after the completion of the line can be put into work。Accelerate the time to market and product features flexibility.

2、Characteristic

1）Media (supports multiple media)

- Power line mode to complete the last 300 m IP access;
- Twisted pair mode to complete the last 600 m IP access;

2）speed

- Transmission rate up to 500Mbps;
- Smooth transmission of IPTV, HDTV and other audio and video signal。

3）reliable

- Support AES 128bit encryption,Ensure network communication security;
- Occupied 2-72MHz band communication，No impact on existing CATV signals or cable broadcasting;
- Follow IEEE 1901 and HomePlug AV standard， Can take up to 4 modules。If communication with LX200V74， 1 LX200V74 supports up to 32 WisPLC PRO networking。

4）simple

- No user configuration, wiring can be completed;
- Special management configuration software，Convenient division network，Convenient networking;
- Modular design，Easy integration into customer products，Accelerated listing cycle。

3、 application area

WisPLC PRO is widely used in industrial and intelligent home systems，A good complement to Ethernet and WIFI，To achieve the purpose of hybrid
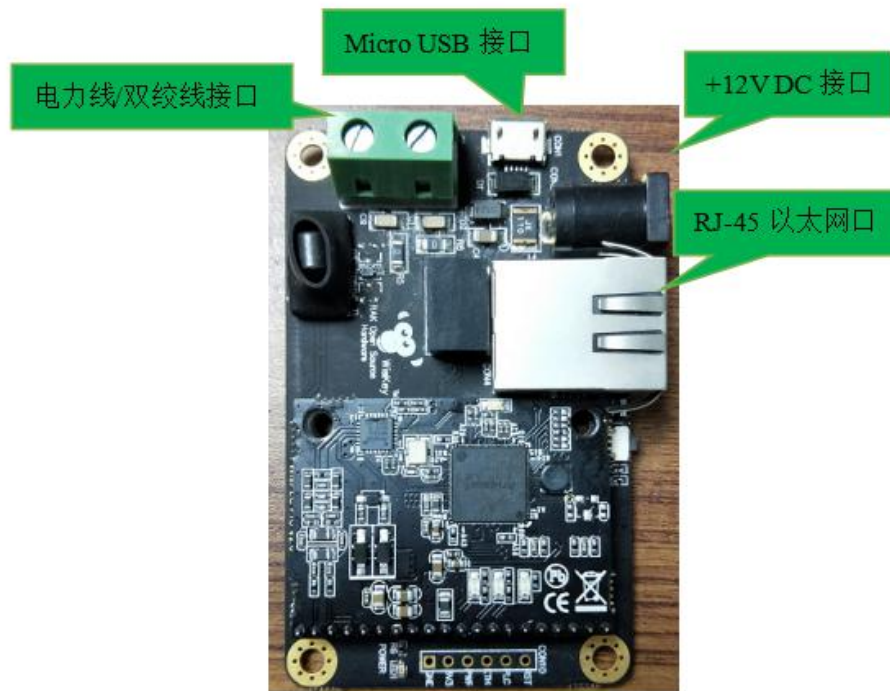
network and seamless network。The current，In smart home、Monitor、Medical equipment networking and other scenarios have a good application。

Table 1 WisPLC PRO Module application domain

intelligent instrument	Smart home
energy management system	Medical system
Automotive electronics charging pile	Industry

4、WisPLC PRO Module physical map

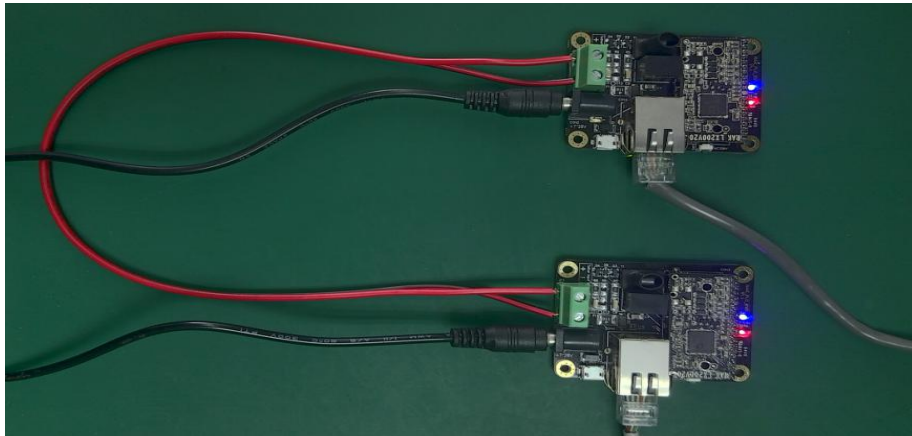RAK WIS-PLC The module is shown in Figure 1，Module small size，Size of 75x50mm。

5、Quick use demo

Need tools（Computer 2 PCS、NetPerSec tool、iperf tool、12V DC The power adapter 2 PCS、Cable 2 root、Power line or twisted pair 1 meters）

1）、Using power lines will be 2 PCS RAK WIS-PLC Module in the direction of the connection，Connect the module to the computer，Connect 12V power supply，At this time the blue light (cable connection) and red light (power indicator) light up；

As follows:

2）、The first computer to establish the receiving end

Open operation、input cmd、Enter、input cd、Space、input iperf Program path、Space、input iperf -s -w -64k -i 10 server、Space；
Set the IP address of the network connected to the module to 192.168.10.100；

3）、Second computers to establish the sender

Open operation、input cmd、Space、input cd、Space、input iperfProgram path、Space、input iperf -c 192.168.10.100 -w -64k -P 10 -i 10   -t99999999、Space；

Connection success as shown below
Sending end

Receiving end

Open the PLC application tool to view the transfer rate in real time, as shown in the following figure,The average transmission rate is 490 Mbits / s.

As follows

6、 Modify record

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