ABSTRACT

This project designs a smart home system based on OneNet cloud platform capable of remote monitoring. The main control module used in the lower computer is Raspberry Pi 4B. The main function realized in the lower computer is to monitor the temperature, humidity and smoke concentration in real time. You can determine the size of the smoke concentration whether to open the alarm module. The lower computer design mainly uses Packet Trecer simulation to realize. Login to the OneNet cloud platform and create the corresponding device, you can upload the monitored data from the host computer to OneNet. Use android studio to design an app that can be registered and logged in, and this app can monitor the temperature, humidity and smoke concentration in the lower unit in real time. And it can control the home appliances. Use OneNet to do data interaction between the app and the host computer.

Keywords: smart home; Packet Tracer; OneNet; android studio