ABSTRACT

Safety is an important thing that must be considered in terms of comfort and security in a home. This is because the house is a place where people live and put their trust in stored things & other important items in the house. However, conventional keys that are widely used today are still vulnerable to break-ins. Therefore we need a reliable and qualified security system to avoid things that are not desirable.

In this study to overcome the problem as above was made a system for security of access to the door of the house to maintain the security of the house itself. This door access security system is based on Palmprint with its object in the form of a certain line on the palm that is used as access to enter the house to open the door and is supported by the Internet of Things system so that residents can control and access the door lock remotely. The use of biometric authentication will replace conventional key so that the door will only be opened if the lines on the palm of the hand can be identified in accordance with the data that has been registered. If there is a burglary or forced lock later the system will notify residents of the house through the application they have.

The results shows that the network system works optimally in the Line of Sight scenario with a distance of 5 meters and produces data delay measuring 0.255436 s and throughput of 8825,933 bytes / s and is obtained from end to end testing of the total system in the 5 meter LOS scenario with a total The average delay is 0.570077 s and the average throughput is 11776.27 bytes / s.

Keyword : *Internet Of Things, Biometric,* Raspberry Pi, *Remote*