ABSTRACT

Public street lighting or abbreviated as PJU is one of the facilities that is a necessity for road users. Public street lighting is one of the needs of the community, it is the obligation and responsibility of the Regional/City Government as a form of service to the community. However, in monitoring PJU it is still not effective because it is still required to monitor at close range which takes more time and energy in terms of monitoring PJU.

To overcome the lack of effectiveness in monitoring public street lighting, a remote monitoring tool for public street lighting based on Lora has been designed using a multinode topology that makes it easy to monitor PJU lights remotely and is able to monitor more than one PJU lamp and can be monitored through monitors and through the website. contained on the Blynk platform.

Based on the results of the design, testing and analysis that have been carried out in kinagara regency, several conclusions can be drawn, namely the test results on transmitter 1 which have an average accuracy of measurement compared to the reference value which is 96.53% and has an average error by 3.47% and transmitter 2 has an average accuracy of 96.54% and has an average error of 3.46%. The measurement of the distance between the two transmitters and the receiver is capable of receiving information up to 180 meters. On sending information from the receiver to the blynk according to the measurements on the receiver monitor properly.

Keywords: PJU, LoRA, Microcontroller, Topology multinode.