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Monitoring Battery Lighting and Public Street Light (PJU) With Telegram-Based Information System Microcontroller

Monitoring Pencahayaan Baterai dan Lampu Penerangan Jalan Umum (PJU) Dengan Sistem Informasi Telegram Berbasis Mikrokontroler

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The development of automation technology has now been felt in all aspects of human life. The convenience and security offered in technology also has a positive impact, especially in the aspect of electrical energy. Public Street Lighting (PJU) is a means of street lighting provided by the Government to improve or optimize road equipment facilities in the form of street lighting tools in order to realize safety, security, order and smoothness of traffic as well as convenience for road users in traffic. Frequent blackouts and lack of supervision are inconveniences for public road users. monitoring technology for battery lighting and public street lighting (pju) with this microcontroller-based telegram information system is designed to make it easier to monitor and monitor if the lights go out at night or there is a problem with the battery that can be fixed immediately, the results can be seen by the sensor (LUX) which is used as an automatic switch that can turn off the lights during the day and turn on the lights at night. And also equipped with an automatic sensor switch (PIR) which if the vehicle is not detected the automatic light will dim and vice versa, if detected with a distance of 8 meters the vehicle automatically lights up. Can inform technicians by telegram of damage to lights and batteries on the road. This is done to increase comfort, efficiency, transportation safety and also to develop technological systems to be more innovative.

References

1. S. B. Karya, “Alat Penerangan Jalan. Peraturan Menteri
2. Perhubungan Republik Indonesia.” Nomor PM 27., 2018.
3. A. T. Murray, “Public Street Lighting Service Standart Assesment and Achievement, California at Santa Barba. Vol
4. ,” 2015.
5. R. Hikmawan & Sugik, “Rancang Bangun Lampu Penerangan Jalan Umum (PJU) Menggunakan Solar Panel Berbasis Android. Universitas Muhammadiyah Sidoarjo. ISSN
6. -2399 Vol 3 ,” 2018.
7. D. Somadani, “Prototipe Penerangan Jalan Umum (PJU)
8. Pintar Berbasis Arduino Menggunakan Solar Panel, Sensor
9. HC-SR04 dan Sensor LDR. Universitas Majalengka. ISSN
10. -1846 Vol.2 ,” 2018.
11. E. Ihsanto, “Sistem Monitoring Lampu Penerangan Jalan
12. Umum Menggunakan Mikrokontroler Arduino dan Sensor
13. LDR dengan Notifikasi SMS.” Universitas Mercubuana.
14. ISSN: 2085-9479 Vol.2, 2016.
15. R. Didik, “Pengaruh pemakaian kapasitor pada lampu TL
16. terhadap efisiensi daya listrik rumah tangga,” Journal Multitek Indonesia Vol.7, 2013.