IoT-BASED MONITORING AND CONTROL SYSTEM (PLN and PLTS)

Aullimansyah
Program Studi Teknik Elektro, Fakultas Sains & Teknologi
Universitas Teknologi Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : iman.aullimansyah@gmail.com

ABSTRACT

Automatic Transfer switch (ATS) *to perform automatic switching from the main source to the backup power supply or vice versa. Along with the development of technology that is all practical and online, in this study an ATS monitoring and control system tool was created using the ESP-32 as a microcontroller and also as an Internet of Things (IoT) device for communication from the blynk application to the ATS module, PZEM-004T as voltage and current sensor module, a 10 Ampere DC relay as a transfer switch between the load and the backup PLN or PLTS, as well as the blynk application to display monitoring results and also function as manual control via the blynk application. The results of testing and measuring the voltage and current at the PLN and PLTS power sources obtained the sensor reading accuracy value with a percentage on 99,80% with an average difference of ± 1 volt reading.*

Keywords **:** *Automatic Transfer Switch (ATS), Internet of Things, PZEM-004T, Relay, Blynk.*