

**EVALUASI KINERJA ALAT PEMAKAIAN ENERGI LISTRIK
BERBASIS INTERNET OF THINGS**

TUGAS AKHIR

Karya Ilmiah sebagai salah satu syarat untuk menyelesaikan jenjang strata satu (S-1) di Jurusan Teknik Elektro, Fakultas Teknik, Universitas Andalas



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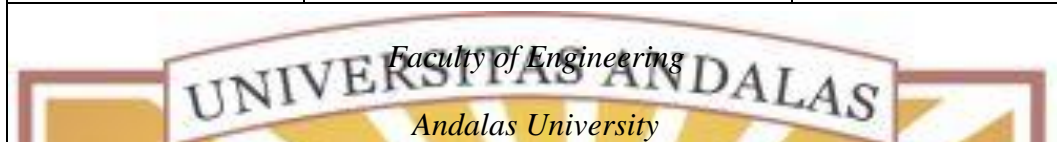
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| Judul | Evaluasi Kinerja Alat Pemakaian Energi Listrik Berbasis Internet of Things | M.Abdillah Satria |
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Abstract

The current use of electrical energy is still ineffective because many electronic devices consume electricity excessively. And researchers have previously made monitoring tools but the accuracy has not met the standards. One way to overcome this problem is to evaluate the accuracy of each component in the monitoring tool that has been made by previous researchers by replacing components that have good accuracy. Therefore, an evaluation is carried out on a monitoring tool based Internet of Things. This IoT system consists of NodeMCU ESP32, PZEM004T sensor, and blynk application. From the results of this study can provide tools that meet the standards for users. Tool testing is carried out by means of system measurement results compared using a standard measuring instrument, which is a power analyzer. The test results obtained an accuracy value of 99.992% voltage, 99.566% current, 99.740% power.

Keywords: *IoT, NodeMCU, PZEM-004T.*