

# **DESIGN OF POWER MONITORING ON REGULATOR FOR METAL AND NON-METAL WASTE SORTING PROTOTYPE BASED ON ANDROID APPLICATION**

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## **ABSTRACT**

*The problem of waste in Indonesia has become the main topic that is often discussed and discussed, the increase in waste is not proportional to the increase in population. Many studies are aimed at tackling this waste, one of which is by making a metal and non-metal waste sorting device that can facilitate human activities in selecting waste. The tool is required to work at all times with 12V and 5V power and is equipped with a renewable energy source, namely PLTS. Therefore, it is necessary to develop a monitoring tool that can show the amount of power generated by PLTS and input for the metal and non-metal waste sorting system. This monitoring tool requires an ESP8266 NodeMCU and an INA219 sensor that can monitor voltage and current. From the test results obtained from the measurement of the INA219 sensor on the solar panel, SCC, Output 12V, and Output 5V, with voltage, current, and power parameters with an average precision accuracy value of 87%-99%.*

**Keywords:** *Monitoring, INA219 sensor, NodeMCU ESP8266*