

# **Rancang Bangun Sistem Monitoring Daya Baterai Pada Robot Beroda Menggunakan Sensor INA219 Berbasis Internet of Things (IoT)**

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## **ABSTRACT**

*A wheeled robot is a kind of robotics technology implementation. The wheeled robot uses power from the battery to perform various maneuvers such as forward maneuvers, reverse maneuvers, left maneuvers, right maneuvers. Currently, current, voltage and power measurements are only carried out when the wheeled robot maneuvers are weakened or unable to move optimally. At the same time, monitoring has not been fully effective because the data is still manually issued. So the development of a power monitoring tool needs to be done to minimize the problems that occur when the current and voltage do not correspond to a predetermined capacity. The monitoring tool will be installed on the wheeled robot section, and then it will send the results of the current and voltage issued by the robot through the Internet of Things (IoT) system. The research procedure will be carried out in several steps, namely testing the tool to determine the value read by the INA219 sensor and the results obtained in all tests. The INA219 sensor can work, but the accuracy of the sensor is still less accurate. There are no significant problems for smooth wireless communication and conform research objectives for sending data through the Android application itself. It can be seen when the value obtained by the sensor is compared with the value obtained through measurement using the AVOMeter.*

**Keywords:** *Wheeled Robot, Current, Voltage, Power*