

RANCANG BANGUN ROBOT PENDETEKSI GAS BERBASIS ESP-8266 DAN ARDUINO

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ABSTRACT

In the modern era, technology is increasingly developing, as well as the world of robotics. Robotics is interesting to learn, by using a microcontroller such as Arduino, a robot can be developed become useful by adding other features. From these problems, research was carried out on robots as gas detectors. With the research and development method, the author uses Arduino and the ESP8266 wifi module as the robot's main components. The robot can be controlled with an android application using Bluetooth connection. The robot can walk and avoid objects automatically. Sensor monitoring on the robot can be done with a wifi connection by accessing the IP through the ESP, which acts as a server to view sensor reading data. The results of this study, the robot responds to commands given very quickly and gives a warning when it detects gas exceeds the specified level.

Keywords: *Robot, Arduino, ESP-8266, Bluetooth, Gas.*