

DESIGN AND CONSTRUCTION OF AIR LEVELS MONITORING SYSTEM IN MALIOBORO AREA USING A WEBSITE-BASED NODEMCU

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ABSTRACT

The development of transportation industry technology is increasing rapidly, as evidenced by the increasing number of motorized vehicles that use gasoline. The use of gasoline in motorized vehicles causes deteriorating air quality around us, especially in big cities. The impact of air pollution is a decrease in air quality, which has a negative impact on humans and living things, especially in tourism areas in urban areas such as in the Malioboro area. By using the NodeMCU ESP32 microcontroller that can be integrated into the internet, monitoring air levels in an area can be done in real-time. This research is a prototype of an air level detector to measure carbon dioxide (CO₂) using the MQ-135 sensor and carbon monoxide (CO) using the MQ-07 sensor based on internet of things technology that uses the Thingspeak server as data storage and uses the Thingspeak dashboard as the user. interface that makes it easy to monitor.

Keywords: *Monitoring, Air content, NodeMCU, Thingspeak.*