

***AIR QUALITY MONITORING SYSTEM AT GOR PERKASA ALAM
BASED ON INTERNET OF THINGS***

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ABSTRACT

Air pollution is currently increasingly worrying. This is a serious problem that can threaten human life Based on the problems in this study, it is concluded that the formulation of the problem in this study is "How to build and design a tool for monitoring air quality based on IoT (Internet of things) The purpose of this study is to design and implement an IoT-based air quality monitoring system. Become a medium for users or the public to find out information about air quality. This research is intended as a means to detect carbon monoxide (CO) and carbon dioxide (CO₂) air pollution. The system is programmed with a specific protocol. The plan for the results of this study is to develop a monitoring device to measure CO and CO₂ levels using MQ-2 & MQ-135 sensors. Sports halls are places where physical activities are often carried out, especially for those who have an interest in exercising. However, sports halls can also cause pollution if not managed properly. Therefore, it is important to maintain the air quality inside sports halls to ensure the safety and health of users. Based on the results of tests carried out for approximately 30 minutes with three tests at Gor Perkasa Alam Bengkalis, it was found that the CO levels contained in the air during the test at Gor Perkasa Alam showed an average CO level of 09.08 PPM, which is classified as Normal or Good. While CO₂ levels are 86.76 PPM, which is also classified as Good.

Keywords: *Monitoring, Air Quality, CO & CO₂*