

ABSTRACT

Currently the threat of air pollution arising from various kinds of burning or disposal gas has resulted in a large adverse effect on public health, especially for people living in shopping area or industrial area. The source of air pollution caused by industrial waste and motor vehicles is the largest contribution of air pollution which is made into the free air. One of the technologies used today that is a source of air pollution is the application of Incinerators. The incinerator is believed by public to produce one of the most dangerous substances, that is Carbon Monoxide (CO), Nitrogen Oxide (NO_x), Sulfur Dioxide (SO₂), Dioxin and Furan. If these carbon monoxide substances not well controlled, then it will cause air pollution and damage to public health.

In this final project designed a tool to find out the value of the levels found in the smoke of the burning. Because in the combustion fumes there are substances that are harmful to the human body, with the tools that made be aware of any value of the substance on the firing of junk.

The test results show that the hardware can be integrated with the software. On the measurement of the levels of smoke, the sensors transmit data value levels of smoke through the Arduino UNO i.e. 96%. Accuracy of 92%, wifi module due to mileage only up to 20 meters. The average delay sending data the quality value of the smoke of burning into the webserver is 6.31 seconds.

Keywords : MQ-7, MQ135, TGS2600, Monitoring, Control, Incinerator, IoT.