ABSTRACT

Air pollution is a condition in which the air quality becomes damaged and contaminated by substances that are either dangerous or harmful to the health of the human body. Air pollution usually occurs in large cities and densely populated areas that produce industrial gases that contain substances above the acceptable limit. The gases are the main air pollutants are carbon dioxide gas (CO2), carbon monoxide (CO) and sulfur dioxide (SO2).

Development of gas detection sensor technology that is currently growing rapidly provide solutions to overcome the above problems. In this study will be made a tool for the detection of carbon dioxide gas (CO2), carbon monoxide (CO) and sulfur dioxide (SO2) as air pollution information. This tool can detect the presence of gas in the air per second in order to obtain the data for the presence of gas is then sent to the cloud system or so-called cloud system via wireless communication using wifi microcontroller module to the next can be connected to the internet can then be processed as air pollution information. To test the sensor, the sensor input into the closed pipe tube and then the tubes were purged gas so that the gas can be spread evenly in the tube.

Hope for the future of this tool can be used to institute that examines air pollution course with the development of technology and peformansi better to use a microcontroller that has been developed at this time.

Keywords : Air Pollution, MQ-7's Sensor, DSM501A's Sensor, MQ-135's Sensor, MQ-131's Sensor, Arduino Uno