

Prototype of Gas Detector with IoT Platform for Notification and Monitoring System

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Abstract

The aim of this research is to build a simple prototype of gas detector based on microcontroller which is integrated with MQ2 gas sensor that can detect harmful gases. The design of this research is based on Prototyping method. Data are gathered through gas sensor and send to Internet of Things platforms. Wemos board is preferred as microcontroller because it has a build-in wifi module to pass the input data from MQ2 gas sensor to internet. MQ2 connected to Wemos board processed the output voltage and measure the sensor threshold. When the harmful gases level detected beyond the sensor threshold, the output voltage is also increased, vice versa. The detector is connected to Thingspeak that record the data from the MQ2 gas sensor through graphic chart. For notification purpose, the gas detector using Blynk apps which alert user through smartphone. The result of this study is a gas detector prototype that potentially used as a monitoring or alert system to minimize the risk of harmful gases leakage.

Keywords: *monitoring system, notification, gas detector, IoT, sensor*