

ABSTRACT

LPG gas is a result of the natural resources that are not can be renewed. Today, it has many benefits of LPG gas used to aid us in our everyday lives. However, despite the presence of LPG gas which helps us does not mean there is no danger or risk posed by LPG gas. One is a fire caused by explosion of gas cylinders LPG due to leakage of gas caused due to errors in the installation of the regulator and hose.

To overcome these problems, at the end of this project has been made **DESIGN AND REALIZATION OF LPG LEAKAGE DETECTOR BASED ON MICROCONTROLLER AND DC MOTOR**. These devices are made using sensors TGS 2610 LPG gas types to detect leakage of LPG gas, while algorithms used to process the ATmega8 AVR microcontroller controls the relay to move the lever or hook that has been regulator attached to the lid using a DC motor.

Because there is no means of calibration gas levels then the level of LPG gas analisis data displayed based on the results of the ADC. Maximum safe limit of gas is more than 120 ADC data, if it exceeds the limit is then microcontroller ordered the relay ON and automatically rotates the DC motor for 2 seconds to open the regulator. This tool is used for detect and combat as early as possible in case of gas leak so that the utilization of LPG gas cylinders would be more secure and comfortable.

Keywords: Microcontroller, LPG, DC motors, TGS 2610