

SMART SAFETY LPG GAS SYSTEM

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ABSTRACT

Fire protective counter measures is one of the many features and aspects that need to be comply when meeting certain building requirement and regulations. Fires within structures and buildings can result in catastrophic consequences. Taking into considerations with aspects related to safety which frequently has attracted the interest of many government or privately funded company, the incidents of gas leaking has become a highly concern issues due to its potential in causing physical or surrounding damage to environment, properties and human's life lost itself. There are many accidents at the kitchen that is caused by the leakage of LPG gas and the "Smart Safety LPG Gas System" is the total solution for these problems. The "Smart Safety LPG Gas System" is the best product for home use and company use. This project use one type of sensors with is MQ2 gas sensor which can detects LPG gas. There are 3 LEDs is use to indicate the level of leakage gas which is green, yellow and red if the gas reaching maximum limit the red LED and buzzer turn on and the stepper motor is used to open the gas tank head while the NodeMcu sent notification to Blynk application.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

These days, the utilization of not newly introduced Liquefied Petroleum Gas (LPG) type of gas usage in Malaysian region is generally utilized for numerous daily activities such as for home usage, cafe, ventures (least scale usage amount to enormous scale usage amount) in transportation or automotive based purposes as a fuels supplement [1]. LPG gas is very important in our daily live for example for cooking, drying and heating. Despite the fact that LPG gas are known as a natural inviting yet at the same time those vaporous can incite a genuine impact if there should arise an occurrence of leakage or disclosure[2]. There are many incidents reported that many deaths because of the leakage of LPG gas that lead to the explosion. As the utilization of the LPG type of gas increases in residential area, the mischances happen due to LPG blast too increases causing an urge in nonstop assessments and checking. In residential area, incidents such as explosion can occur easily and unexpectedly due to substandard cylinders, damage quality valves and loosen head gas used over a long period of time without proper replacement [3].