ABSTRACT

One of the properties of LPG gas is that it is flammable so that an explosion or fire is triggered by a leak of LPG gas arising from the gas cylinder or an error in the installation of the regulator and the hose and user ignorance when there is a LPG gas leak. The purpose of this final project is to monitor LPG gas levels via a smartphone and provide early warning to users when an LPG gas leak is detected.

In this final project, an LPG gas leak detection system will be designed that can monitor and detect LPG gas leaks. LPG gas level data will be displayed on the Android Application and can delete stored data and there will be a notification when an LPG gas leak is detected.

Based on the tests that have been carried out in this final project, this LPG gas leak detection system shows that the average time the sensor detects LPG gas leaks at a distance of 20cm and 30cm from the source of the leak is 5 seconds and 5.31 seconds and the android application is running normally according to its function. . The total time required for sending data from Nodemcu to the Android application is 6.71 seconds.

Keyword: *LPG gas, monitoring gas levels, Android application*