

FIRE DETECTION SYSTEM IN HOUSING USING MULTI NODE SENSOR BASED ON TELEGRAM

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ABSTRACT

In Indonesia, there are many buildings and housing that are located very close to one another. As a result, fires often occur which usually start from human negligence. This fire is very detrimental to humans, especially can cause trauma for those who experience it. With these problems, the author makes a fire detection system in housing using a NodeMCU microcontroller with a Flame (fire) sensor and an MQ-2 (Gas) sensor in order to inform the early symptoms of a fire. This system will work if one of the flame (fire) sensors and the MQ-2 (Gas) sensor detects a fire, it will send a notification via telegram and can be directly monitored on the Blynk application. Based on this research, a fire detection tool is produced that can provide warnings in the form of Telegram notifications and real-time information using the Blynk application with a 100% success rate.

Keywords: *Fire, Sensor flame (Fire), Sensor MQ-2 (Gas), Telegram*