ABSTRACT

Forest fire is an event where a very rapid reaction of a fuel is accompanied by the emergence of a fire in a forest or land. There are several impacts that can be felt from forest fires, especially in Indonesia, namely the presence of skin diseases, respiratory problems and the decline of the economy of the community. From these problems human awareness in this problem can minimize the occurrence of fires, but on the other hand it is necessary to build a system that can minimize the impact of the occurrence of forest fires. Along with the development of this detection system technology, it provides a solution by integrating Raspberry Pi as a Microcontroller and the LoRa module which functions as a data sender media. From the results of the tests that have been carried out, this system is able to detect three sources by generating fire intensity values ranging from 0 to 1000, besides that it can be show location points in realtime, and data on each Transmitter can be seen using Serial Monitor.

Keywords: forest fires, multi channel flame sensors, LoRa modules, Raspberry P, Dragino OLG01