ABSTRACT

A tracking of a person's position in the mountains is an activity that is quite difficult for humans to do. Because the distance of human fields will be very limited due to in mountainous areas there are many very tall trees and uphill paths. Based on these problems, a human monitoring system was created in mountainous areas. This system receives data on longitude and latitude values sent by the GPS module to the user's device using LoRa media, namely radio signals using the LoRaWAN module. With the value of the coordinates, the system can monitor the user's location using real-time coordinates. By using a panic button, the system can provide notifications when the user experiences a problem. Based on the test results, this system can monitor in the form of real time user movement display with a data transmission delay of 1 second, and display a notification when the user presses the panic button which will activate the buzzer.

Keywords: LoRa, GPS, LoRaWAN, Monitoring