

ABSTRACT

Direction is needed to reach the location of a destination, in the forest there are several paths to reach the destination. From some of these pathways, it can lead to wrong paths, so if the user exits the track when heading to the destination location, position tracking is necessary. To overcome this problem, a system is built using a support device from compass technology to display the user's direction so that it helps the user read directions easily, GPS (Global Positioning System) displays the user's coordinate data in each position shift, this system uses the APC220 communication module as the sender because the forest is not there is a wireless network so the data to be sent is obtained from GPS to be sent to the monitoring system, the 16X2 set point and LCD display displays data from a compass that is converted to a type of wind direction and displays a line coordinates that have been passed by the user. This human tracer based on microcontroller produces coordinates of data such as -6.697912 107.634330 and the degree of direction has been converted into the direction of the North (0°), Northeast (45°), East (90°), Southeast (135°), South (180°), West Power (225°), West (270°), Northwest (315°) sent via the APC220 communication module are forwarded to the monitoring system.

Keywords: APC220 Communication Module, Human Tracer in the Forest, GPS Coordinate Point, Compass Conversion, Compass Module HMC58833L