

ABSTRACT

The development of existing technology, especially autonomous robots, has covered daily human work, so the use of package delivery robots can now be applied in Indonesia. In countries such as Japan and Korea that are facing a declining birthrate and an increase in the elderly population, the number of workers is decreasing. This condition encourages the utilization of robots to replace couriers or security officers at various delivery locations. Robotics, electronics, and other advanced technologies are used to ensure the process of delivering goods to the destination address runs smoothly. Therefore, the author is interested in designing an autonomous package delivery robot, where the user only needs to provide the destination coordinates to the robot, and the robot will automatically move towards the specified coordinates without requiring human control. Based on the five specifications tested, namely the ability to reach a predetermined destination, the ability to navigate the path to be traveled, detect waypoints, the ability to return to the starting point of delivery (Return to Home), and the ability to provide information and monitoring, it can be concluded that all specifications are functioning properly.

Key word : package delivery, aotonomous, passcode hand tracking, mission planner, package monitoring