

## **ABSTRACT**

*Online shopping is one of the technological developments in the trade sector that makes it easier for someone who does not have much time to go to a conventional seller's place. However, when shopping online, several problems arise, one of which is the package courier who comes when there is no one at home. Actually, to solve this problem, there are many products such as boxes to receive packages from couriers, but these boxes still have some risks, such as allowing people other than couriers to enter objects that can damage the package. Therefore, it is necessary to improve the function of the box, one of which is by utilizing Internet of Things (IoT) technology. This research utilizes NodeMCU which allows the box owner to open and lock the box door using a solenoid doorlock, alarm and notification if the box door is forcibly opened, and is equipped with an ESP32-CAM to monitor the box and everything can be controlled via the Telegram application. Based on the data results, it was found that the device was successfully made with all tests running successfully. The average time required for ESP32-CAM to send photos and notification messages is 8.71 seconds for ESP32-CAM on the front side and 9.17 seconds for ESP32-CAM on the inside side. While on NodeMCU the time needed to open the doorlock solenoid is 4.42 seconds, to lock the doorlock solenoid is 4.35 seconds, and for the alarm function and notification message is 4.48 seconds.*

**Keywords:** *mailbox, solenoid doorlock, ESP32-CAM, NodeMCU, Telegram*