

**UNIVERSITI TEKNOLOGI MARA
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**AUTOMATED SECURITY MINI
PARCEL BOX**

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ABSTRACT

Often called a smart package delivery acceptance system, this concept is a very useful tool for domestic applications that we may utilize when we are away from home. Nowadays, people lead more luxurious and comfortable lives since the online market delivers everything straight to their doorstep. People are increasingly making all types of purchases online rather than in real businesses from sofa sets to all-pins. This project is installed in front of the house, a parcel box is a parcel receiving box. A traditional-parcel box has the drawback that if it is left unlocked, the parcel might be damaged or stolen. In order to guard against theft or damage, a recipient must also often inspect the package box. This report aims to design a smart parcel box using ESP32 Microcontroller. If the package is legitimate and belongs to the receiver, the smart parcel box may be unlocked by the phone through Blynk IoT app. This project have three inputs which is IR sensor and push button. It also has 3 outputs which is buzzer, servo motor and LCD. Smart Parcel Boxes are postal containers that facilitate package retrieval and container security for receivers.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Due to the ease of use provided by the Internet, individuals increasingly choose to purchase online rather than at physical stores these days since it is easier to compare prices and avoid crowds. In addition, the Covid-19 pandemic epidemic makes individuals stay at home and avoid social situations. People are forced to do everything including shopping online because of the epidemic. Online shopping is becoming more and more popular. You can get whatever you need, from apparel to luxury goods to food and everyday essentials, online. The current trend of internet purchasing has directly raised demand for delivery services.

Delivery service refers to the procedure of delivering goods to the receiver. A mailbox is a metal box placed outside a person's home where mail is sent and delivered, according to the Cambridge Dictionary. Comparable to a mailbox, a parcel box is bigger since it is meant to hold packages. A mailbox or parcel box is seen to be a key component of the delivery service. The deliveryman places the package inside the box, and the receiver then takes the parcel out of the box.

The way that parcels are now delivered to people has several drawbacks, but there are rarely any answers to these drawbacks. Pretend the deliveryman has the choice to leave the package in the parcel box or on the doorstep or to come back at a later time when the recipient is available if they are not home when the deliveryman delivers their package. If the recipient doesn't have a parcel box outside their home, the deliveryman may elect to leave the package on the doorstep or in the box, which puts the box at risk of being stolen or destroyed. The weather is a different concern that might damage the shipment.

The project's objective is to develop an automatic system for receiving package deliveries. Other than that, this project to create a prototype for a smart parcel box that uses a