



## Smart postbox

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### ABSTRACT

Conventional postbox became fancy with the advent of the electronic communication system. Most people lack time to check postboxes periodically; lead to them forgo essential letters. The combination of electronics, communication with the conventional postbox is an efficient solution for this problem. Thus, we present a simple, low-cost, and effective smart post detector. The Arduino technology used here is a user-friendly and globally accepted efficient technology and cheaper compared with other microcontrollers. The obstacle sensor has mounted on the postbox opening to detect the letter insertion when it crosses the sensor. Arduino board receive the obstacle sensor's signal and sends a command to the GSM module. A GSM module device allows a SIM card and operates over a subscription to a mobile operator, similar to the mobile phone. The GSM module will make a call and send an SMS to the user to notify the arrival of the mail. This system makes it easier for the user to get notified whenever a mail is received unless there is no network signal at the moment. The future aim is to develop a mobile application to make things more comfortable for the user. The thickness of the postbox opening may need restriction to prevent the insertion of multiple letters at once. The main aim of the system is to help the user by alerting every letter received.

**Keywords:** GSM module, Infrared sensor, Obstacle sensor, SIM card.