

ABSTRACT

In general, system security safes still looks quite safe and security system is simply to lock and unlock the door using a password safe. Sentry safes are located in certa in indoor course in volves field workers. Safeguards need to be carried out mainly at night to prevent loss of the contents of a safe deposit box. Since it is not efficient, it requires a safe security system that can be controlled by their owners.

The final project will be made a safe security system microcontroller based with sms and alarm facilities. Activation begins with the RFID system reads in RFID Card Reader and then proceed with an emphasis pin code on the keypad. Combination lock will open if the pin code is pressed correctly. The system is also equipped with a fault detector that has been integrated on the ATmega328 microcontroller program that will detect any rfid tag and pin inputting keypad. If an error occurs RFID tag detector and inputting the keypad on the microcontroller will give as many as five (5) times the chance. If on the occasion of the fifth (5) there are errors or inputting rfid tag keypad pins on the microcontroller will immediately send an SMS to the owner's mobile phone and activate the alarm.

In this final project has been realized safe microcontroller based security system with sms and alarm facilities. system has been successfully activate the solenoid when the RFID tag from the keypad and inputing from right, send sms and activate an alarm in the event of an error of RFID tags and inputting the pin on the keypad.

Keywords: **RFID, SMS, Alarm, Arduino Uno**