Designing and Testing Safe-Box Safety System based on RFID with WiFi Module and Telegram as Remote Monitoring Media

M. Arief Sya.bani

Computer Engineering Study Program, Faculty of Information Technology and Electro Universitas Teknologi Yogykarta Jl. Ringroad Utara Jombor Sleman Yogyakarta E-mail : <u>arief97syabani@gmail.com</u>

ABSTRAK

To anticipate cases of theft, an integrated security system is needed, such as safety deposit system. In general, the security system of it is less than optimal. Therefore, the researcher to produce a security system based RFID security (Radio Frequency Identification) as a sensor accessing the safe with the WiFi Module (WeMos D1) as a medium for sending information, the Android application used to expand information dissemination through Telegram, so as to create an integrated security system. The design of this security system used the Wemos D1 R2 microcontroller which was programmed using the Arduino IDE software as a controller, a numeric keypad as a safe access password keyboard, and a buzzer that was used as a notification sound and LCD (Liquid Crystal Display) as a status display.

Kata kunci : Safety deposit system, RFID, WiFi Module (WeMos D1), LCD (Liquid Crystal Display).