ABSTRACT

Fires in high-rise buildings are more deadly and detrimental if they do not fulfill the fire safety components, a fire detection system that is less responsive is a serious matter that causes delays in the fire response process, resulting in many people losing property and lives. One of the efforts to prevent fires in buildings is to prepare a fire protection system. The response time of the Fire Department to notification of fires in Indonesia does not exceed 15 minutes which consists of the time starting from the receipt of notification of a fire in a place. To solve this problem, a fire warning system was designed with a full addressable fire alarm system based on IoT. To solve this problem, a fire warning system was designed with a full addressable fire alarm system based on IoT, which is expected to be used by firefighters who are required to quickly extinguish the fire.

Based on the test results, it can be seen that if the sensor reading exceeds the specified parameters, the fire warning will be active. The sound of the alarm buzzer and emergency lights is an indicator of a fire in the building. In addition to indicators at the scene of a fire, this system can send notifications in the form of Telegram messages to related parties to deal with fires faster. Telegram messages will continue to be sent every 12 seconds so that notifications are read immediately. Push button can be used if the sensor is not working.

Key Words: *Full Addressable Method, Fire Alarm System, Internet of Things.*