

## **ABSTRACT**

*Programmable Logic Controller (PLC) is a device that is very commonly found in the industrial world. PLC can adjust the production process according to the program automatically. However, the process of making and monitoring production is still carried out locally. By diverting the Internet of Thing (IoT) in the industrial world (Industrial IoT), users can monitor and control industrial processes remotely via the internet.*

*In this study, a control and monitoring system (Andon) will be made that can be applied to industries that use PLCs through the Raspberry Pi as a gateway to ANTARES. Users can see the system and on the android application so that they can access and manage the system anywhere and anytime while connected to the internet.*

*Android applications that have been made have successfully sent control commands and received Andon data with an average latency of 0,521 seconds on the HTTP protocol and 0,703 milliseconds on the MQTT protocol. The throughput generated by the application is 3,4 Kb/s on the HTTP protocol and 3,6 Kb /s on the MQTT protocol.*

**Key Word:** *Control System PLC, Andon System, Industrial IoT, PLC*