ABSTRACT

DESIGN REMOTE **MONITORING** *SYSTEM OF PLC BASED ON INTERNET OF THING (IoT)*

The development of the Internet and Embedded Computer trends have also affected the area of industrial automation, which is that the impact of monitoring *capabilities that have only been accessible in the factory environment, now can be accessed anywhere using the internet network.*

In this research, *a PLC* monitoring *system will be designed remotely using the Raspberry Pi as a medium for reading PLC data memory and sending PLC data to the IoT platform. The PLC used is the PLC OMRON CP series, as the interface of the plant that will be controlled and monitored. The data communication protocol used is the FINS protocol, as a regulator of communication and data transfer between the PLC and Raspberry Pi. The IoT platform used is the ANTARES platform, as a cloud from reading PLC data on the Raspberry Pi.*

This research is expected to help the user for monitor PLC remotely, via a computer or android smartphone which is connected to the internet network.

Keywords: *Internet of Things, PLC OMRON CP series, Raspberry Pi, FINS Protocol, ANTARES.*