ABSTRACT

Monitoring System of Water Usage in Hydroponic Plantation Based on Internet of Thing (IoT)

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Hydroponic plants must always be monitored so that the growth process can run well, a good monitoring system will certainly make it easier for hydroponic plant activists to always be able to pay attention to the state of the plant. With an Internet of Things (IoT) based system, it will certainly make it easier to monitor plants, because the system is made connected to the internet network that can be accessed from anywhere. The output of this study is an Internet-based system of Things (IoT) using Raspberry Pi 3 to reduce expenses and losses that occur if the hydroponic plants owned run out of water. This prototype works using two ultrasonic sensors to detect water in hydroponic plants, servo motor as a water hose guide, and L298N module where the module is used to start the water pump used, if the water volume in one of the plants runs out, the servo leads and the module will turn on water pump to fill water in the plant.

Keywords*: Hydroponics, Internet of Things, Raspberry Pi 3, Prototype.*

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