

DESIGN AND BUILDING OF A PROTOTYPE OF IOT BASED FLOODLIGHT CONTROL SYSTEM AT YOGYAKARTA INTERNATIONAL AIRPORT

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ABSTRACT

Effective and efficient operation of floodlights is necessary because the number of electrical technicians at Yogyakarta International Airport is limited and the current operational conditions of all floodlights are only carried out by one Molded Chase Circuit Breaker (MCCB) control which is not in the technician's stand-by room. The aim of making a Floodlight lamp prototype based on an Arduino Nano microcontroller with a dimmer module is so that it can be controlled remotely based on the Internet of Things and can be controlled anywhere and at any time effectively, with applications that can save time in operating and monitoring Floodlight lamps. This Floodlight lamp prototype was made using SIM800L as an internet network connector, PZEM-004T sensor as a current and voltage sensor, LDR sensor and dimmer module as a light intensity regulator, Arduino Nano as a data processing microcontroller so that control and monitoring can be accessed automatically via smartphone. with the Blynk application. With this prototype, it can be used as a basis for creating a Floodlight control tool to increase the effectiveness and efficiency of technicians in operating and monitoring Floodlight conditions.

Keywords: Blynk, Floodlight, Internet of Things, microcontroller, controller.