

RANCANG BANGUN SISTEM ELEKTRONIK AC (Air Conditioner) DILENGKAPI PENGONTROL DAN MONITORING JARAK JAUH MENGGUNAKAN SMS BERBASIS ARDUINO DAN MODUL GSM

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ABSTRACT

Currently, Air Conditioner (AC) is widely used by industry, hospital, hotel, office, and private home. Air conditioner (AC) usage has various watts of size wire to be used for small, medium, or large capacity. Air Conditioner (AC) in the working principle is a cooling machine as an indoor air conditioning system. The air is sucked in the circulation continuously using an indoor blower were passing through the evaporator. When passing a high-temperature air evaporator is absorbed by heat using refrigerant materials, then released outside the room, when the refrigerant stream passes the condenser. Air Conditioner (AC) continuously cools the room. It becomes its own constraints where it makes the air-conditioned quickly damaged, especially on the PCB electronic system because it often works in a full day. In addition, resulting in swelling of the cost of electricity bills. Therefore, it needs to create an additional electronic system to minimize the occurrence of damage. The electronic system created using a microcontroller that is later equipped with the SMS-controller control and monitoring feature. The SMS-based remote control and monitor features include monitoring temperatures and monitoring the AC condition either turning on or off. It can also turn on the AC to automate mode and cool-fashion with temperature 22 °C and off the air conditioning where it is not yet in the air conditioner module (AC) circulating. One of the components of a GSM module enabled as a translator of SMS commands submitted in the Commander's language.

Keywords: *Air Conditioner (AC), control and monitoring, SMS-based*