

ABSTRACT

At This Moment, Using an Air Conditionair or AC has been primery need for people especially in hot situation in the world make us use AC in order to atmosphere to be fresh. But, many of us use it more excess example we forget turn off I when we don't use it. This is make extravagance for using electrical energy. So, writer want to make control sistem of AC mechine using SCADA base on PLC.

As input in sistem are sensor that plant in the room that has function to know situation in the room using or unusing. If the room unusing condition, PLC will turn off AC otomaticlly with remote. For supervisory, this sistem are completed with HMI (Human Machine Interface) thar make us easily in controlling in room condition. With this sistem, writer wish this sistem get optimalitation using AC in the room.

In this test cosist of two stages that is test in sensor and test efeciency of energy in otomatis mode. In first test, we know that PIR sensor can't detect input more then 1 input and this sensor resist from external noise. From second test, we know that this sistem can be economical using energy 30%.

Keyword: *PLC, SCADA, Sensor, HMI*