

ABSTRACT

Habits of people in general to smoke in the area of public facilities that can interfere with the users of public facilities. And therefore required a separate room for smokers. In general, for the air conditioning to keep them fresh in a smoking room that will set the required exhaust air circulation. Most exhaust work manually, not automatically regulated so as to have the rotational speed that is constant at a certain value to regulate air circulation. Controlling exhaust velocity should be adjusted as needed based on the content of carbon monoxide gas. One way to detect smoke in the room is to use carbon monoxide gas sensor MQ-7. MQ-7 sensor detects carbon monoxide gas which terkandung in cigarette smoke, then the generated voltage value will be processed by the microcontroller on arduino uno with fuzzy logic method as decision makers. Determination of the exhaust fan speed based on fuzzy logic. Fuzzy logic will process the content of carbon monoxide in the gas detection sensor as an output decision makers.

The output of the microcontroller will control the exhaust speed automatically to regulate the air circulation in the room smoking. two sensor MQ-7 placed dititik different for detecting ppm levels of carbon monoxide gas.

Keywords: Exhaust, carbon monoxide sensor MQ-7, fuzzy logic, arduino uno