

# **RANCANG BANGUN SISTEM SIRKULASI UDARA OTOMATIS PADA SMARTHOME BERBASIS PIRANTI NODEMCU 8266**

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## **ABSTRACT**

*In 2019 Indonesia was hit by a very severe forest fire that caused many losses and even caused many victims, both humans and flora and fauna in the forest. This forest fire also caused a very high air pollution level and could enter people's homes. It causes many respiratory diseases and disturbing many residents' activities. The air inside the house should be the air that is safe for consumption by those in the house, but dirty air can still enter the house through the gaps and ventilation holes. Therefore we need a system that can regulate air circulation in the house to be safe for consumption by the living things in it. In this study, an automatic air circulation system will be installed in the house using nodemcu8266 as a controller and the MQ-135 sensor to detect air pollution levels both inside and outside the house with the help of fans to regulate air circulation to run appropriately and oxygen cylinders. It is used when the air from outside the house cannot be taken for a clean air source because it does not allow it to be filtered eating used oxygen. In the test, the test's success rate is 100%. The tool's reliability can be said to be excellent even though oxygen has to be supplied manually because of the difficulty of holding high pressure in oxygen.*

**Keywords:** *Air Pollution, Air Circulation, Nodemcu8266, Sensor MQ-135*