AIR POLLUTION SYSTEM

19DCS088 GRACY PATEL || 19DCS89 KENEE PATEL || 19DCS098 PARTH PATEL

Abstract

In this new era there is a rapid increase in industries, urbanization and technology we also have rapid increase in pollution which ultimately is the air pollution (major affected). Air pollution is one of the biggest issue that is faced by the nation today. So here, we have IOT based air pollution system, that is developed to monitor the quality of air in the room. It has LCD Monitor display that displays the quality of air (in PPM) in the environment. Here, the major focus is to use MQ135 sensor for the Air Quality Measurement.

Tools and Technologies

- Arduino UNO
- MQ135 Sensor
- 16*2 LCD Display
- Male Jumper Cables
- Female Jumper Cables

References and Bibliography

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4. .cohttps://how2electronicsm/iot-air-pollution-monitoring-esp8266/
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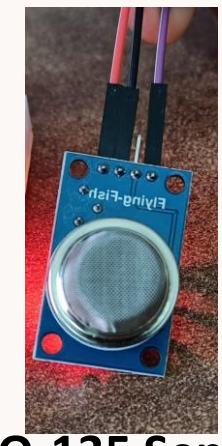
Introduction

Air pollution has been one of the biggest issue in today's world and to figure out a way to monitor the pollution is necessary. Pollution is the reason why the health problems like are increasing day by day. And this is the reason for the problems like mild allergic reactions such as irritation of the throat, eyes and nose as well as some serious problems like bronchitis, heart diseases, pneumonia, lung and aggravated asthma. There has been numerous reason why the pollution has been increasing be it urbanization, rapid increase in population, industries, the vehicles near us and what not. Also, according to a latest survey India is the fifth most polluted country among 117 countries, regions and territories around the world, assessed. The country's annual average PM2. 5 levels reached 58.1 micrograms per cubic meter (µg/m3) in 2021, returning to pre-quarantine concentrations measured in 2019. So, IOT based air pollution system will display the quality of air (in PPM) in the environment which will monitor and help us to understand the pollution around us.

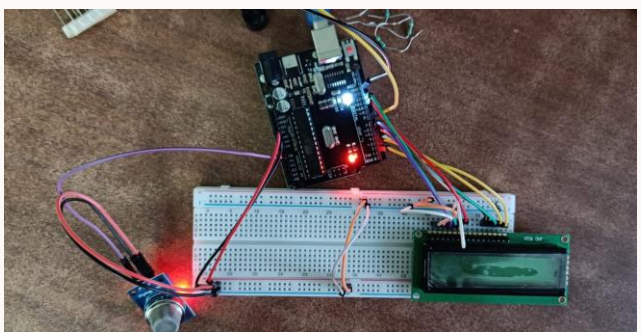
Future Scope

- We will focus on calibrating the sensor with different atmospheric scenarios.
- We will also try to send the reading to the server so that the readings can be remotely observed via esp8266.
- We will create dashboard for the analytics.
- We will try to add mobility to the system.

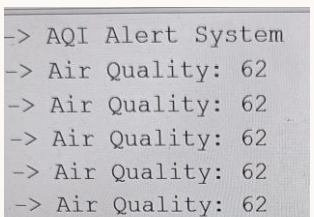
Screen Shots



MQ-135 Sensor



TENTATIVE SETUP



SENSOR READINGS

Conclusion

The air pollution system is built to monitor the pollution around us in order to improve the quality of air by improving the aspects of monitoring by using IOT technology. It helps in various industries like industrial perimeter, indoor air quality, data science etc. Here, Arduino which is used is the heart of the IOT project and the entire system is developed using Arduino, MQ135 Sensor and LCD Display.

Lab Faculty: Prof. Gaurang Patel, Designation: Assistant Professor

Computer Science & Engineering
Devang Patel Institute of Advance Technology and Research
Charotar university of Science and Technology