

LPG Gas Detection using Arduino

Mrs. Bandal S. S, Mangat Kumar, Mithun Kumar, Nityanand Kumar, Abhinab Anand

Professor, Department of Computer Science and Engineering

Students, Department of Computer Science & Engineering

Navsahyadri Education Society's Group of Institutions, Polytechnic, Pune, Maharashtra, India

Abstract: *This project presents the development of a low-cost LPG gas leakage detection system using Arduino. The system uses an MQ-2 gas sensor to detect the presence of LPG gas in the environment. Upon detection of gas concentration above a predefined threshold, the Arduino triggers a buzzer to alert users and rotates a servo motor to automatically turn off the gas regulator, preventing further leakage. Additionally, a cooling fan is activated to help disperse the leaked gas. This project aims to enhance safety in households and industrial areas by providing an early warning system for gas leaks, ensuring rapid response and reducing the risk of fire or explosion. The implementation is simple, reliable, and highly suitable for real-time gas monitoring applications.*

Keywords: LPG gas leakage.

