

Smart LPG Gas Monitoring and Automatic Booking with Alert System

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Abstract: In recent years, rapid advancements in IoT and embedded systems have enabled automation in various sectors, including home utilities. One major challenge in households using LPG is determining the level of gas in the cylinder and timely booking of replacements. This paper proposes a smart LPG monitoring system with automatic booking and alert mechanisms. The system continuously monitors the gas level using a load cell and ESP32 microcontroller, processes data via HX711, and sends SMS alerts through a GSM module. A web-based interface allows users to choose between manual or automatic booking modes. The system ensures real-time status updates, making LPG usage more convenient and efficient.

Keywords: ESP32S, Internet of Things (IoT), GSM Module, Load Cell, Booking Configuration, Web Interface

