

Prepaid Water Meter With Quality Checker and Auto Complaint Generation Using IOT

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Abstract: *Water efficiency is a global concern, and smart water systems aim to achieve maximum water efficiency. A prepaid water meter is proposed to measure water consumption by households, addressing the issue of shared consumption and overpayment. The system uses an IoT design for real-time data collection to monitor water flow, utilization, and quality. It addresses challenges in the water sector, such as flow rate measurement and water supply monitoring. The system uses Solenoid Valve and Turbidity sensors to measure water quality and ensure safe drinking range. Java is used for web applications, while a microcontroller, like Arduino, processes the data. When water quality falls below acceptable levels, the system sends an email alert to the municipal corporation, allowing authorities to address the issue promptly and ensure clean water supply. A MySQL database is used to record customer information, water consumption, and charges.*

Keywords: Turbidity sensors, gas sensors, PH sensors, microcontroller, cloud storage, sensors, Internet of Things (IOT), and solenoid valve , real time monitoring