

Smart Home Automation Appliance

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Abstract: *Smart Home Automation is a safe, networked, and intelligent home control system integrated with automation control, network communication, and Internet of things (IoT) technology. In a smart home, various appliances and devices are interconnected, allowing occupants to monitor and control them remotely. Here are some key points: A smart home utilizes IoT to monitor and control appliances using a home automation system. It enables seamless communication between devices and provides convenience for users. Smart home Systems consist of hardware interfaces (such as sensors and Wi-Fi technology) and software interfaces (applications for controlling devices). Users can manage lighting, climate, entertainment systems, and more. Energy Management, Smart homes optimize energy usage by controlling appliances efficiently. Security, Sensors enhance home security by detecting intrusions or hazards. Convenience, Users can remotely control devices via smartphones, tablets, or computers. Challenges, Existing systems face limitations such as unfriendly user interfaces and high costs. However, ongoing research aims to address these challenges.*

Keywords: NodeMCU , Rely , Arduino IDE.

