

RFID Home Security & Automation System

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Abstract

Design and build a proof of concept model demonstrating an application of Radio Frequency Identification (RFID) technology for use in a home or office lighting automation system. The system provides new means for reducing energy consumption through motion sensors and timers to determine when a person enter or leaves a room, these platforms are based purely on motion meaning “no motion, no light. The RFID based system utilizes medium range RFID readers and tags located at doorways. As an individual enters a room the lights turns on and remain on only while the person is in the room. The RFID based system provides a very effective methodology for lighting control with only minor setbacks for real world application.