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A novel approach in ENERGY CONSERVATION SYSTEM 'Energy conservation & monitoring control system design'

Abstract

This paper describes an ENERGY CONSERVATION & MONITORING SYSTEM, designed to avoid usage of extra energy consumption and monitor the usage of energy. Energy crises have caused economic halts to many countries, causing hindrance in development of developing nations. This project is a small effort to solve this problem. The testing and demonstration of this project was conducted in Faculty of Engineering Sciences and Technology, Hamdard University, Karachi, Pakistan. In first stage of the project, load calculation was done in which load of whole campus was determined. After that, implementation of this project was done in defined area. In which motion sensors were used to detect the presence of body in a certain range. The appliances were controlled by motion sensor in that area and this was logged in software connected with computer through serial port. The simulation results show that after implementation of this project around 20- 30 % energy was saved.

Keywords — Energy conservation system, energy management system, microcontroller, motion sensor, visual basic