Abstract

Security and Automation is a primary issue in a modern domestic and office environment. The use of wireless sensor network in automation offers various advantages and new challenges. The objective of this paper is to survey WSN for the home/office automation and presents the different technologies used, topology used, user interfacing techniques etc. to understand the advantages and limitations of the existing work. In this paper, we propose a simple and flexible wireless model for domestic automation of temperature, light and security against burglary, water leakage, fire, and gas leakage by implementing reliable sensor nodes which can be controlled and monitored from a PC connected to master node. Microchip PIC16F877A MCU, Zigbee and sensors are the core components of the implementation.

References

- Ming Xu, Longhua Ma “Design and Implementation of a WSN for smart home” 2010 symposia and Workshop on ubiquitous, Autonomic and trusted computing.


Index Terms

Computer Science
Wireless

Keywords
WSN  Microcontroller  Home/Office Automation  Wireless Technologies