

Abstract

In our daily activities, people need a vehicle to support various activities outside the home. One to note is on the issue of a system of four-wheeled vehicles parking area in a public place such as office buildings, college campuses, shopping malls that already apply a system of monitoring or not. On previous technology by KleemannPark Parking system parking has been created using hydraulic automatic.

In this study, developed the system of monitoring of existing technology, namely Wireless Sensor Network (WSN), however there are a few enhancements component is XBee series 2 as communication data. The sensor of this tool detects the incoming cars occupy parking slots will then automatically display options (filled or empty), the sensor is to be installed on each LDR slot car parking lines. The result of each motorist entering the parking area will know the information availability.

Based on the test results, the system can provide information related to land parker status (filled or empty) automatically by the sensor threshold amounted to 153 cd. The maximum delay of a network system that is obtained is 2,518462 ms. optimal Distance for the system to work is 30 meters while for a distance of over 40 meters then the communication between nodes is disconnected.

Keywords : Wireless Sensor Network, zigbee, sensors LDR, PC, dot matrix display 32x16.