RFID Toll Collection System

Abstract-

This paper is based on RFID Toll Collection System. This system is based on Radio Frequency Identification technology which uses RFID Tag and RFID Reader for identification. The RF sensor in the system detects the approach of the incoming vehicle. The driver has to place the tag on the reader and toll deduction takes place through a prepaid card assigned to the concerned RFID tag that belongs to the owners’ account. This makes tollgate transaction more convenient for the public use.

The basic advantages of the system are travelling time is decreased, congestion free network, less emissions in toll area and no infrastructure cost is required.

The main idea behind implementing RFID BASED TOLL COLLECTION SYSTEM is to automate the toll collection process their by reducing the long queues at toll booths using the RFID tags owned by car owner.

The system produced is 8051 microcontroller based system with C coding, and the hardware is interfaced with keil and metlab 2010 coding.

Keywords- RFID Tag, RFID Reader, RF Sensor