

GSM BASEDAUTOMATIC ENERGYSMETER READING SYSTEM WITH INSTANT BILLING

ABSTRACT

The technology of e-metering (Electronic Metering) has gone through rapid technological advancements and there is increased demand for a reliable and efficient Automatic Meter Reading (AMR) system. It is a simple low cost wireless GSM energy meter and its associated web interface, for automating billing and managing the collected data globally. Also they can monitor the meter readings regularly without the person visiting each house.

A GSM based wireless communication module is integrated with electronic energy meter of each entity to have remote access over the usage of electricity. A PC with a GSM receiver at the other end, which contains the database acts as the billing point. Live meter reading from the GSM enabled energy meter is sent back to this billing point periodically and these details are updated in a central database. A new interactive, user friendly graphical user interface is developed using Microsoft visual studio .NET framework and C#.

With proper authentication, users can access the developed web page details from anywhere in the world. The complete monthly usage and due bill is messaged back to the customer after processing these data.

EXISTING SYSTEM

- traditional meter reading methods used

DISADVANTAGE

- Electrical power has become indispensable to human survival and progress. Apart from efforts to meet growing demand, automation in the energy distribution

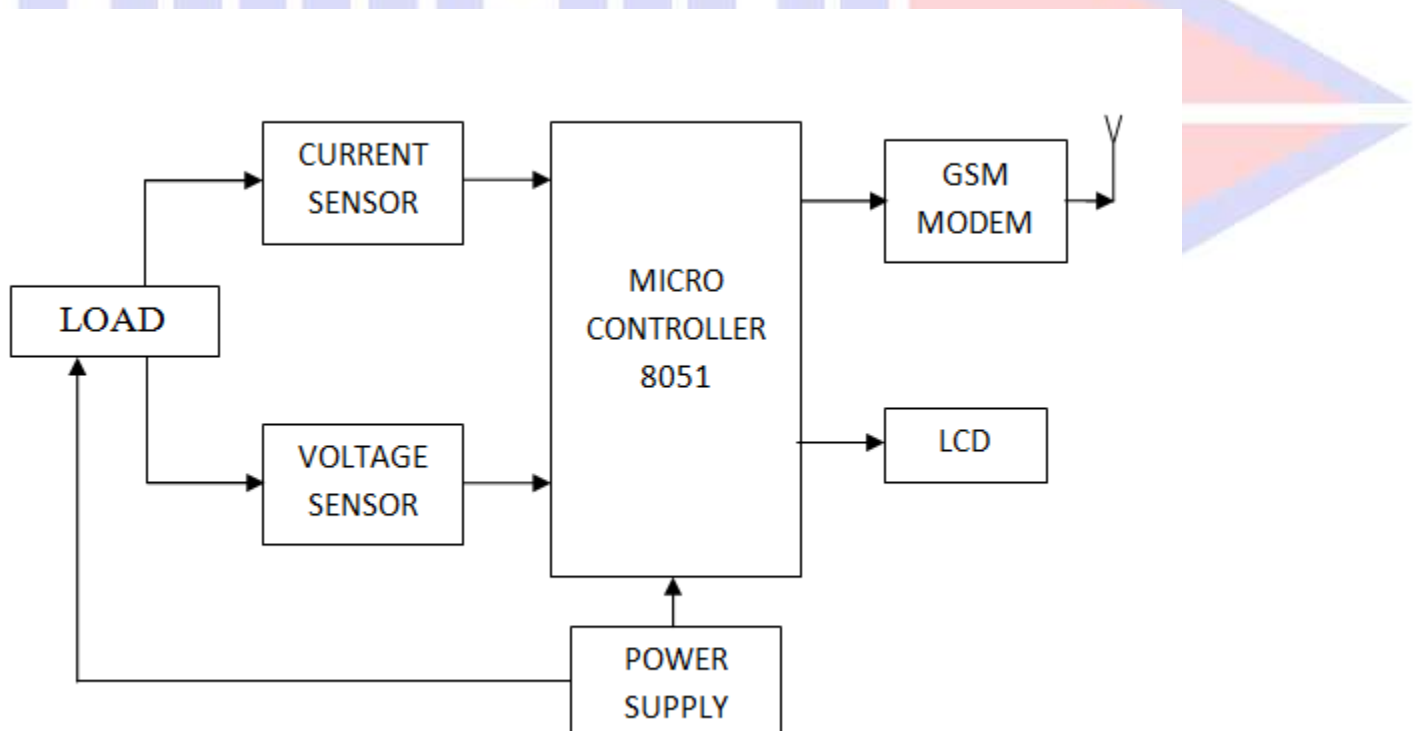
PROPOSED SYSTEM

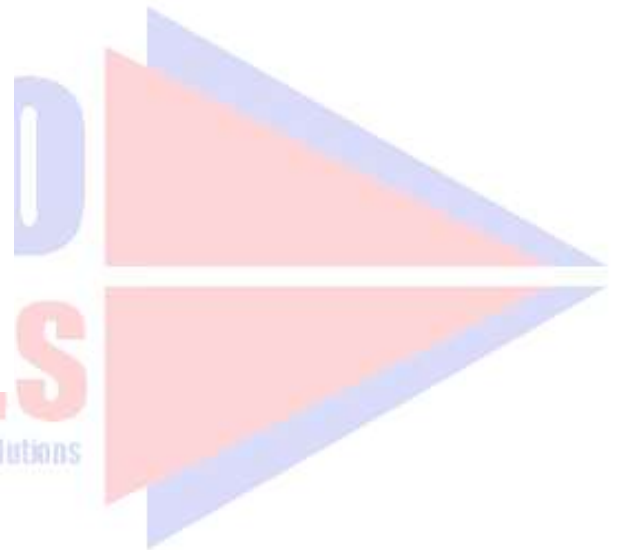
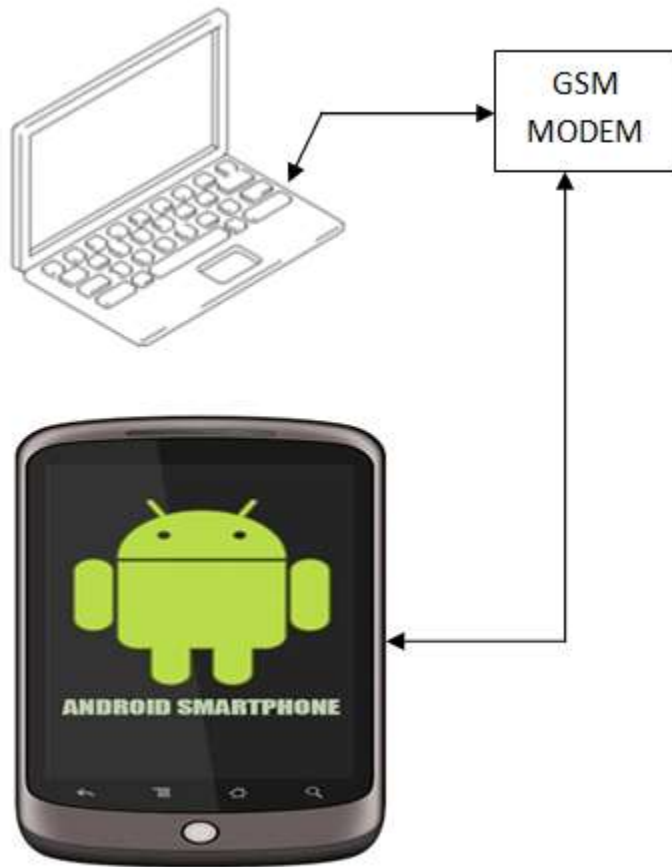
- replaces and enables remote access of existing energy meter by the energy provider

ADVANTAGE

- Collects meter readings electronically
- Reduce the cost of utilities to customers and the cost of delivering utilities to the utility provider.
- The onset of rural electrification provides opportunities for new and more efficient metering technologies

BLOCK DIAGRAM





HARDWARE REQUIREMENTS

- Load (Bulb)
- CURRENT Sensor
- VOLTAGE Sensor
- Micro Controller
- Power Supply
- GSM MODEM
- PC
- Mobile Phone

- LCD Display

SOFTWARE REQUIREMENTS

- MCU COMPIERS
- PROTEUS SOFTWARE

MICROCONTROLLER may ATMEGA,8051,PIC OR Arduino

