Reliable Power Quality Monitoring and Protection System

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Abstract: ***The principle goal is to add a GSM based vitality meter perusing framework and burden control through SMS. Power division sends workers to take meter perusing each month, which is a costly and tedious employment. The proposed venture gives a helpful and productive strategy to maintain a strategic distance from this issue. The power division and the client can get the readings of the vitality meter of buyers by means of SMS. The heaps can likewise be checked by the voltage level indicator.This undertaking likewise screens load control by sensor which it remove the framework when high or low voltage occurred.It utilizes a standard advanced vitality meter that conveys yield heartbeats to the microcontroller to perform meaning essential activity. On getting charge it can switch ON/OFF the heaps.***

I.INTRODUCTION

Programmed meter perusing (AMR) framework is a successful method for information gathering, that permit generous sparing through the decrease of meter read, more prominent precision, permit continuous perusing, enhanced charging, lessened treating. It gives better client administrations, by sending caution of force cuts and culmination upgrades

It's available a system correspondence innovation which empowers vitality Provider Company to peruse the meter perusing frequently without theperson using so as to go by every house GSM correspondence innovation. AMR framework is extremely helpful for remote range or little towns which are not associated by any method for transport.

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BasicPotentiometerCircuit:

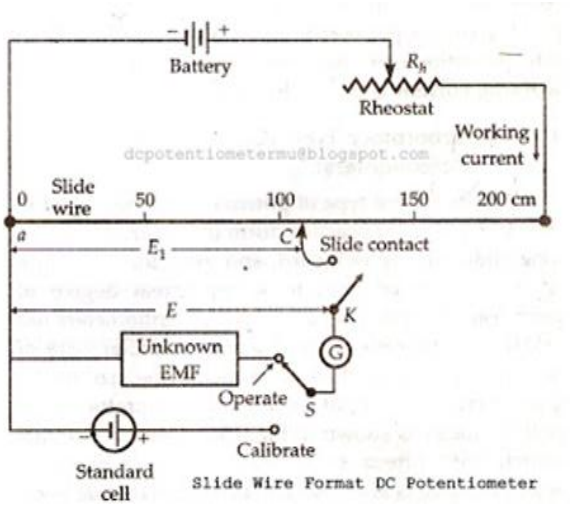

Fig 1: Basic Potentiometer Circuit

II EXISTING SYSTEM

But this method demands to occur the interference problem in the particular interval. Initially the consumer fail to pay the electrical bill to disconnecting the power supply through the proper selection of switch located at the control unit.

Drawbacks

- It is increasing the interference for both consumer and server during the zigbee technology.
- Consumer is not updated of his usage
- Consumer may not get the bill slip within due date.
- It can't display on the amount of reading in LCD.
- It has maintenance cost is very high.

PROPOSED SYSTEM ADVANTAGES

- It has high accurate meter reading and billing.
- The GSM network has virtually full coverage area of all over the world.
- The international roaming is not possible

III . BLOCK DIAGRAM

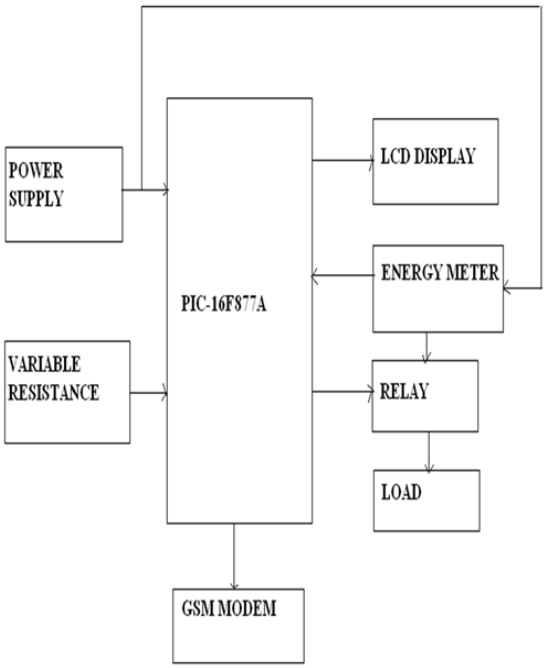

Fig 2:GSM Networks

This work monitors load control by sensor which it remove the system when high or low voltage occurred.It uses a standard digital computerized meter that conveys output pulses to the microcontroller to function counting for necessary action. On receiving output it can switch ON/OFF the loads.

IV CONCLUSION AND FUTURE WORK

The automatic energy meter is the realistic approach to the energy measurement using the mobile communication. It has a high degree of the accuracy for the measurement of the energy consumed, then it simplifies the work of the electricity board in tripping the supply to a particular customer incase occurred the fault signal for power fluctuation. This system will not require the network communication system to be set up, since the mobile technology is already set up thus saving the cost of the final instantiation. This reduce the work of the office person to a great extend. It also reduce the difficulty faced by the people when readings are taken manually. It helps the customer in knowing about the due date for the payment of bill. The basic principle of VCS and LM of measured parameter can be applied to many other application such as manufacturing plants and commercial building.

Further this work can be uncovered with a non unpredictable memory IC like EEPROM alongside a keypad so that the client the change the versatile number according to the necessity.

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