

Energy Meter per Hour Average Max and Minimum Load Display on LCD

<https://www.youtube.com/watch?v=TnZYebqwHKI>

This project is to monitoring of the Digital Energy Meter. This system enables the user to read the meter readings regularly without any confusion. This can be achieved by the use of Microcontroller unit that continuously monitors and records the Energy Meter readings in its permanent (non-volatile) memory location. And display the total amount on LCD.

The Microcontroller based system continuously records the readings and the live meter reading can be sent to the LCD display. The micro controller automatically takes the responsibility of calculating the bill with the data received from the energy meter, and the tariff provided by the operator and displays the same on the LCD.

The major advantage of this system is user can easily identify the load of each device. And at the end of the month, it is very helpful to take readings for electricity department.

The main features of this project are:

1. Wireless Meter Reading transmission.
2. Automatic tariff calculation.
3. High accuracy.
4. Instantaneous display on hand held device.

The main blocks of this project are:

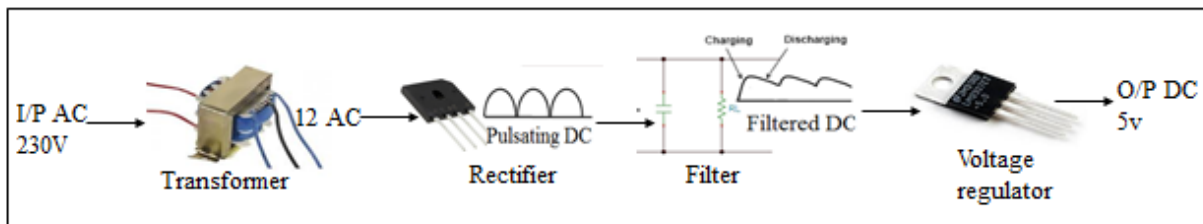
1. Micro controller (16F872)
2. Reset button

3. Crystal oscillator
4. Regulated power supply (RPS)
5. Led indicator
6. Energy meter
7. Optocoupler
8. Buzzer.
10. LCD

Software's used:

1. PIC -C for compiling and dumping code into controller
2. Express SCH for Circuit design.

Regulated power supply:



Block diagram:

**Energy meter per day average, max and min load display
on LCD**

