

A Presentation
On

“TITLE”

SOLAR BASED AUTOMATIC WATER LEVEL SENSAR AND WATER PUMPING SYSTEM FOR NEXT GENERATION APPARTMENT AND SOLAR CLEANING MACHINE



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Content

- Introduction
- Literature Review
- System development
- Advantages, Disadvantages
- Application
- Conclusion
- References

Introduction

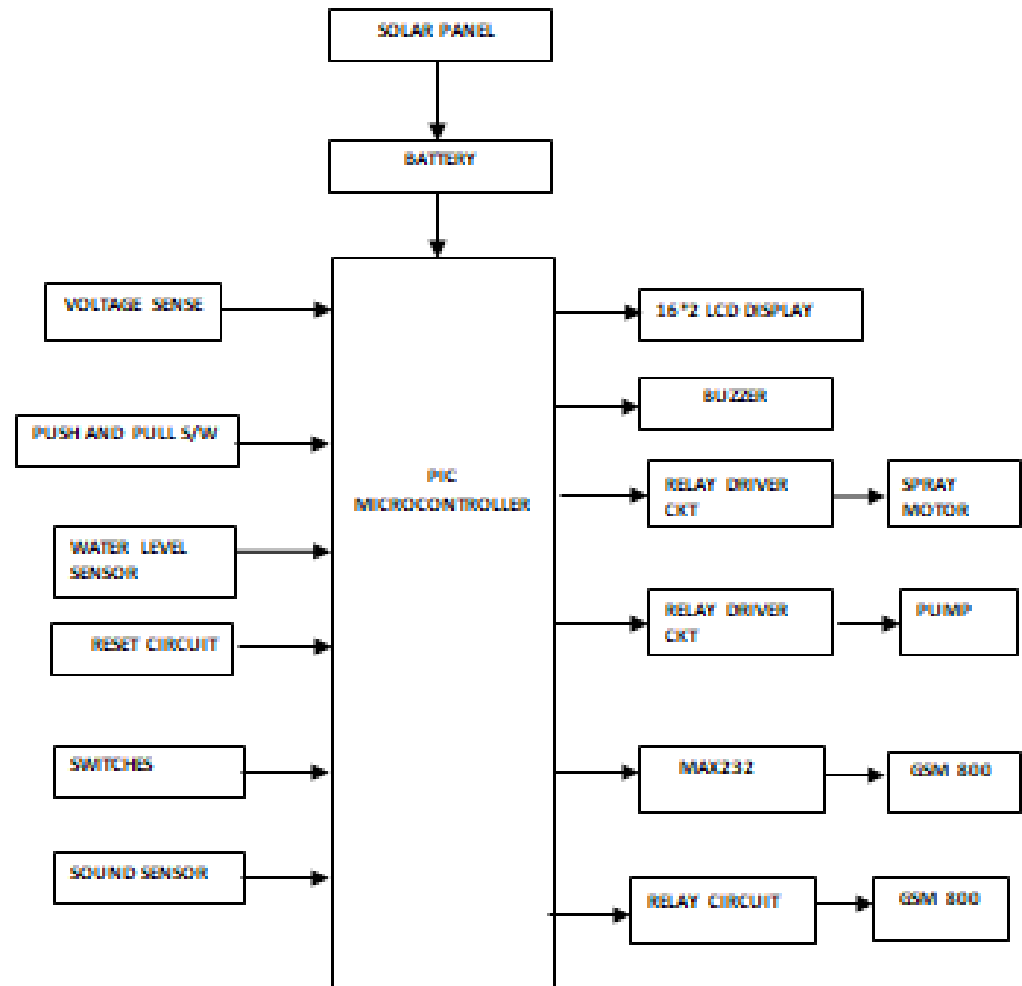
- * The performance of a solar water pumping system is discussed in this project.
- * supply of electricity is not reached to every metro Politan city.
- * provides an free energy after initial investment is Made.
- * system consist of a photovoltaic (PV) array, DC Motor and a pump.
- * introduction of solar water pumps and irrigation Systems to help provide sustainable for farmers in the United nation.

Literature Review

<i>Sr. No.</i>	<i>Name of author</i>	<i>Name of Paper</i>	<i>Publication Name</i>	<i>Technique Used</i>
1	A. K. Jain, M. N. Murty, and P. J. Flynn	Data clustering: a review	ACM Computing Surveys, Vol. 31, 1999. [1]	Basic of Data clustering.

System Design

Block Diagram



■ **Hardware Design -**

■ **LCD DISPLAY**

- * Alphanumeric display is used to display information .
- * It used to display the status of the system.
- * 16×2 display is interface with PIC controller.

BATTERY

- Voltage: 12V
- Approx. Weight: 0.57 kg
- Operating Temperature: -20 to 40 Degree Celsius.

SOFTWARE DESIGN -

- * Program software - MPLAB IDE 8.00
- * Language - Embedded C
- * PCB design - PCB Wizard.

Advantages

- * Automated cleaning system thus do not require any man power.
- * Reduce threat to human life.
- * Maximum power harnessed Throughout the year due to clean pannel surface.
- * cost of production is low. Working principle is quite easy. Portable.low maintenance.

Disadvantages

- * Rolling brush which consists of cloth would need to be changed.
- * Ineffective for sticky dust and cannot clean the dust at the corner .

Application

- * Space craft solar panels in home applications, Solar panels in industries etc.
- * It can be used to clean the exterior glass of the buildings by changing some assembly.
- * It can be used to clean floor with some modifications.
- * Solar plate automatically clean.
- * water supply for villages in developing world.
- * pond water management and water transfer.
- * All solar panel based applications can be Cleaned like solar panels on.

Conclusions

- * By using solar based automatic water level sensing water pumping system for next generation Apartment we can reduced city human efforts such as;
- * when water level in water tank will be either over Flow or below the minimum range then pump will be working automatic.
- * If any unwanted particle damped in water tank then alarmed will buzzered.
- * solar plate also clean automatically without human efforts due to all these reasons we get clean water and water tank condition is must hygiene.

References

- * Dabhi chirag and Gandhi mayank "Design and development of solar panel cleaning machine " Scientific journal of impact factor (SJIF) :4.72 Special Issue SIEICON - 2017
- * kiran M. R, Rekha G. Padaki . " Self- cleaning Technology for solar PV panel ".IJSDR .
- * https://en.m.wikipedia.org/wiki/solar_panel.
- * <https://youtube.be/gz8cq5mUHDo>.
- * V. A. Ballal, Prof. R. M. Autte. " Dual axis solar and Panel cleaning system."

Thank you
Any Questions???