

ABSTRACT

In this project, a design of Hybrid Power Supply is proposed for home application. The motivation of this project is that the hybrid method is becoming more popular method for automation and robotic application. In the near future, the hybrid method will be a useful method, because it can save a lot of energy by using it. For the project hybrid fundamentals will be implementing to create a power supply. This power supply will have two sources that is a solar panel and also a normal supply that is a plug point supply (240V 50Hz). The power supply will supply an output of 12V and also can stand until 3Amp of current. In built this project there is 4 major part need to be build. There is solar panel controller circuit, low voltage detector circuit, switching circuit and a voltage regulator circuit. This project will provide a 12DC output because it purposely creates for an automation system. Usually the automation system are using electronic part and it need DC supply to make the circuit function.

OBJECTIVES

- ~ To design power supply by using hybrid method
- ~ To built the power supply base on the design
- ~ To create a power supply that can save energy
- ~ To give an output of 12V and can stand until 3Amps

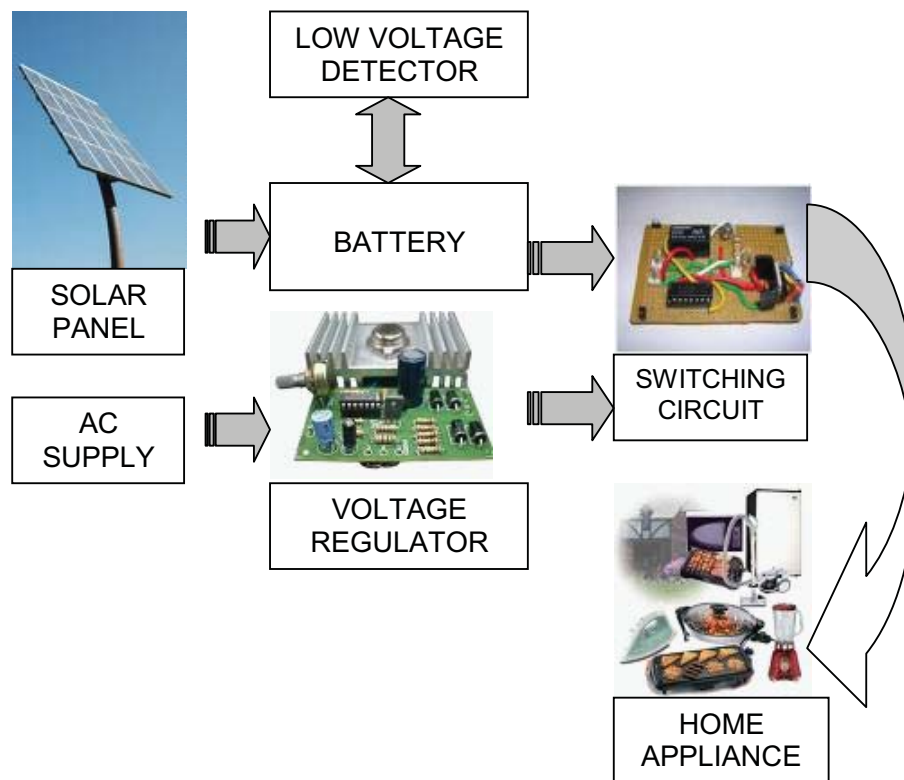


Figure 1: Hybrid Power Supply Operation Block Diagram

ADVANTAGES

- ~ Can save a lot of energy
- ~ Use renewal energy (solar energy)
- ~ Low cost

NOVELTY

This project is a innovation that has combine the solar panel and normal supply that is plug point (240V, 50Hz) to give only one out put that is 12 V and can stand until 3Amps

Researchers Info

Adri Mohd Fuad
Hyreil Anuar Bin Kasdirin

Tel : +6(06)-555 2215
Fax : +6(06)-555 2222
E-mail : hyreil@utem.edu.my