The smart Cloud cover for solar panels

The National Institute of engineering, Mysore/ 1st SEM/ E&C -A Section

PROBLEM STATEMENT

The smart Cloud cover for solar panels: When clouds cover the sun, light levels are reduced. Thicker cloud cover will reduce operations of solar

TEAM MEMBERS

Abin R V
Anthony Lanson S
MudduKrishna.y
Milana G
Anagha Acharya

INTRODUCTION

Clouds do affect solar panels. The amount of power your solar panels can produce is directly dependent on the level of light they receive.

In full, bright sunlight, solar panels receive maximum levels of light. During those "peak" sunlight hours, your solar panels will produce power at their maximum capacity.

When clouds cover the sun, light levels are reduced. This does not shut down power production, however. If there is enough light to cast a shadow, in spite of the clouds, your solar panels should operate at about half of their full capacity. Thicker cloud cover will reduce operations further. Eventually, with heavy cloud cover, solar panels will produce very little useful power.

Solar panels hold a wealth of benefits, both for individuals and for the world at large. Economically, solar panels promise to lower the cost of electrical power. Environmentally, solar panels can give us cleaner power, sustainable power that will not require further damage to the environment. Solar power can reach remote areas. It can carry education, or urgently needed medical information.The effects of clouds on a solar panel, though, might diminish those and other promising benefits.

IDEA GENERATION

Made a solar tracker system using ldr sensors Arduino, motor, solar panel, etc., The solution for the respective problem statement, by our prototype was that it increase the efficiency of the solar panels by moving the solar panels to the respective position of light, during rainy days.

PROTOTYPE IMAGES