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Two axis sun tracking system using fuzzy logic control

This research presents two axes solar cell system tracking by 3-sensor. Motion according to the sun's position is based on fuzzy logic control principles based on the light intensity of the LDR (Light Dependent Resistor). Sun tracking to make solar cell systems get higher wattage, when compared with fixed solar cell systems. Principle of control using a fuzzy logic based on the method of Mamdani's Fuzzy Inference System to control the signal through the microcontroller. The microcontroller will receive the signal values of all 3 sensors and process the signal through the control unit to order the DC motor to adjust the solar panels on both axes to follow the position of the sun to the solar cell system. As a result, the fuzzy-logic inference of two-axis system has a higher power output than without fixed solar cell systems.

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