عنوان مقاله:

Maximum Solar Energy Saving With Solar Tracker Control System

محل انتشار:

دومین کنفرانس بین المللی رویکردهای نوین در نگهداشت انرژی (سال: 1391)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Solar tracking allows more energy to be produced because the solar tracking control system is able to keep equipment like sun dish and photovoltaic cell align with sun. The output power produced by high-concentration solar thermal and sun dish systems is directly related to the amount of solar energy acquired by the system. It is therefore necessary to track the sun’s position with a high degree of accuracy .There are actually several solutions to solve this problem. Accordingly, this project will include the design and construction of a microcontroller-based solar dish tracking system and commences by providing a high level overview of the sun tracking system field and then describes some of the more significant proposals for closed-loop and open-loop types of sun tracking systems and finally Thermal energy produced by sun dish can be used for one cycle of sterling motor and cooker and absorption chiller to generate electricity.

کلمات کلیدی:

Microcontroller, Sun dish, Sun position, Sterling motor, Thermal energy, IR sensor