

## **A Control Algorithm of Maximum Power Point Track for a Photovoltaic System**

Chiu, Yu-Kuei; Chung, Yi-Nung; Wang, Hao-Ren;  
Yu, Chin-Chung; Chen, Iong-Zong

### **Abstract**

This research develops a control algorithm, for automatic tracking the maximum power point for a photovoltaic system,. In this paper, we use a control algorithm, to combine two methods denoted, perturbation and, observation (P&O) and, three-point weighting (TPW). This tracking system, enables photovoltaic modules to achieve maximum efficiency under a variety of solar irradiation and temperature conditions. In order to verify the performance of this development, we design an experimental system, circuit. According to the practical experiment, the system will produce fast, accurate and effective tracking results.

Key words: Perturbation and observation; Photovoltaic system;  
Three-point weighting