

Standard Paper: A New Design of the P & O MPPT Tracking Method Dedicated To a Photovoltaic Site

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Description

This paper proposes a new design of photovoltaic site integrated in Algerian three phase grid using the technique for designing perturb and observe (P & O) mode maximum power point controller for photovoltaic systems under fast changing atmospheric conditions. Maximum power point Tracking (MPPT) is a technique that uses iterative search algorithms to find the point of operation of the solar module so that the power generated is maximal without interruption of operation of the system. As performing MPPT method the P & O is used to find solutions for the identification of the best possible coefficients functions of the controller to drive the fixed step size of proposed maximum power point algorithm. P & O has another advantage, it is to track the maximum point of power even during variations in illumination and temperature. The simulation of the system operates in two modes: the mode required for testing different ...