Abstract

Maximum power point tracking (MPPTs) play an important role in photovoltaic (PV) power systems because it maximize the output power & efficiency of PV systems. MPPTs find and maintain operation at the maximum power point. This work presents in details implementation of Perturb and Observe MPPT using buck-boost converter. Some results such as current, voltage and output power for various conditions have been recorded. The simulation has been accomplished in MATLAB/SIMULINK software. The obtained results and the theoretical operation confirm the reliability and performance of the proposed model. It is more efficient, accurate, used rapid and low cost technique without need for complicated mathematical operations and is independent of device physics.

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Index Terms

Computer Science

Information Science
Keywords
Photovoltaic Module  buck-boost converter  P&O Algorithm  Modeling  Simulation.