An Adaptation of Multi-Module Converter of PV Configuration using a Wireless Senser Network

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Publication date

2021/10/9

Journal

Design Engineering

Pages

2870-2883

Description

A solar photovoltaic (PV) energy is considered the most promising energy source due to its clean and sustainable energy. As the installed capacity of a PV system is continuously increasing, a new strategy for management and optimal energy harvesting is required. Nowadays, there is a new strategy which depends on a controlling and mentoring PV power plant based on a wireless senser network (WSN). In this paper, Acentralised controller for multi-module converter of PVconfigurationbased on WSNis proposed. A new step decision isdesignedfor this centralised controller to process each PV array individually. This proposal will minimize the cost by reduce number of control compounds of the PV plant and abbreviate the losses by diagnosis the fault early. To assess this configuration, a grid-connected PV system is simulated usinga MATLAB-SIMULINK. The results proved the validity to process many PV modules …