Abstract

Of the energy source point of view, for a photovoltaic array (GPV), the power production varies strongly according to insolation level; temperature and nature of the load on which the GPV debits, and according to the characteristics of the latter, a very strong variation can be to find between the potential power of the generator and that really transferred to the load in direct connection mode. Therefore, in order to extract at every moment the maximum of power generated by the GPV and to transfer it to the load, it must be equipped with a switch-mode converter which plays the part of interface between the two elements. This switch-mode can be a Boost (Step-up) or Buck (Step-down) converter according to the applications.

References

Energy Transfer Optimization in Photovoltaic Conversion by the Maximum Power Point Tracking

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Index Terms

Computer Science

Applied Sciences
Keywords

Photovoltaic  Regulation  Extreme command  Optimization  Power.