Abstract

More sophisticated applications require electronic converters to process the electricity from the PV device. These converters may be used to regulate the voltage and current at the load, control the power flow in grid-connected systems, and mainly track the maximum power point (MPP) of the device. Therefore, this paper tries to study an electronic converter in PV systems, namely the Buck converter, and propose an easy way to electronic converter designers to calculate component values needed to realize it.

References

Easy Way to Electronic Converter Designers to Design a Buck Converter Application for Photovoltaic Systems

- Microchip PIC 16F87X Data Sheet (DS30292C).
- Putting into service of dry charged batteries; OLDHAM France S. A.
- LM35Precision Centigrade Temperature Sensors National semiconductor data sheet.

Index Terms

Computer Science                  Power Systems

Keywords

Photovoltaic generator  Optimization  Power  Regulation  efficiency