Abstract

Now a days, small scale solar array and PV module is having low voltage. So to connect them to grid, it is necessary to boost the output voltage higher than 300 V. There are some
technologies available like high voltage boost converter, soft switching converters. But they have poor reliability due to absence of isolation and low power conversion efficiency. This paper represents a high step up Dc-Dc converter which has series connected forward converter and flyback converter using transformer technology to increase the utilization with an advantage of high system reliability and high power conversion efficiency. In this paper design and analysis of proposed system are presented along with the performance analysis and simulation. Also, a 125 W hybrid Dc-DC converter hardware model has implemented for experimental verification.

References

Design of Series Connected Forward Fly Back Step up Dc-Dc Converter


Index Terms

Computer Science
Power Electronics

Keywords
Dc-dc Converters
Forward-flyback Converter
Forward Flyback Transformer.