

# ICRAAESCCT 2018

International Conference on  
Research Advancements in Applied  
Engineering Sciences, Computer and  
Communication Technologies

12<sup>th</sup> & 13<sup>th</sup>  
July 2018

BVRIT, Narsapur,  
Telangana.

Organised By

B. V. Raju Institute of Technology  
Vishnupur, Narsapur, Medak District, India

&

Institute For Engineering Research and Publication (IFERP)

In Association with

**SAEINDIA**  
Society of Automotive Engineers (INDIA)



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# ***International Conference on Research Advancements in Applied Engineering Sciences, Computer and Communication Technologies***

*Narsapur, Telangana, 12<sup>th</sup> & 13<sup>th</sup>, July 2018*

## **Performance Investigation of 3Z Buck Boost Converter for Renewable Applications**

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### ***Abstract:--***

In case of renewable generation systems like Solar, Wind and Fuel cell it is required to use DC-DC converter to increase the voltage levels to meet demand. In such case the operating efficiency of dc-dc converter plays a vital role in energy conversion generally lie in the range of 60-80 percent. In this paper a 3-Z cascaded network is proposed for the renewable energy applications operating at higher efficiency. A comparison is made between conventional dc-dc buck boost converter with the proposed 3-Z cascaded network and analyzed its performance with lighting load. Simulation analysis is also performed to validate the proposed converter behavior.

### ***Keywords:***

About four key words or phrases in alphabetical order, separated by commas.

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**Development of Efficient Modified  
Heuristics on Virtual Topology  
Design and Reconfiguration in  
Fiber Optic Networks in the Case  
of Link Component Elimination /  
Failure and its Performance Analysis**



**Dr. Y. Rama Mohan  
Dr. V. Raghunatha Reddy**



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