

# Implementation of a multi-modular converter for application in distributed generation

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## Abstract

The rapid expansion of electric power systems and the need for more clean energy sources make the implementation of distributed energy resources with photovoltaic and wind generation an attractive option for modern systems. In both applications, power converters are used for the interconnection to the grid. Parallel connection of inverters has been used to achieve power level expansion and system redundancy. More recent works have been focused in providing a modular and flexible interface that can adapt to different load requirements. This paper presents the implementation of a multi-modular converter for application in distributed generation. The proposed approach is suitable for applications that require high power transfer with lower size and volume, it also offers more reliability at a lower cost. Experimental results are provided to validate the proposed architecture.