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Single Phase PV Inverter Applying a Dual Boost Technology

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Abstract : In this paper, a single-phase PV inverter applying a dual boost converter circuit inverter is proposed for photovoltaic (PV) generation system and PV grid connected system. This system is designed to improve integration of a Single phase inverter with Photovoltaic panel. The DC 24V is converted into to 86V DC and then 86V DC to 312V DC. The 312 V DC is then successfully inverted to AC 220V. Hence, solar energy is powerfully converted into electrical energy for fulfilling the necessities of the home load, or to link with the grid. Matlab Simulation software was used for simulation of the circuit and outcome are presented in this paper.

Keywords : H bridge inverter, dual boost converter, PWM, SPWM
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