

Experimental Study of Boost Converter Based PV Energy System

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Abstract : This paper proposes an implementation of boost converter for a resistive load using photovoltaic energy as a source. The model of photovoltaic cell and operating principle of boost converter are presented. A PIC micro controller is used in the close loop control to generate pulses for controlling the converter circuit. To performance evaluation of boost converter, a variation of output voltage of PV panel is done by shading one and two cells.

Keywords : boost converter, microcontroller, photovoltaic power generation, shading cells

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