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Performance Of Flat PV Panel Cooled By Heat Sink And Wick Structure

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Abstract : In this paper, it is clearly analyzed how the temperature affects the efficiency of the solar panel and it is found that there is drop in the efficiency when temperature of module is increased beyond certain limit, so it is necessary to fabricate a cooling system, in order to improve the efficiency. In our project the process of cooling is done by using air and wick structure. Cooling is done by using aluminum fins and cotton wick. The variation of efficiency of PV module with time under different operating conditions is depicted. Thermal and Electrical characteristics of PV panel is analyzed and curves are plotted. Finally, the efficiency of PV panel increased to 1.33 percentage.