

Comparative Study of Half Cut Solar Cell and Bifacial Solar Cell with Standard Solar Cell

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Abstract: *The main purpose of this thesis is to make comparative study of half cut solar cell and bifacial solar cell with standard solar cell. The main procedure of this thesis was divided into three parts. The first part presents the detailed explanation about the solar cell. The second part shows the information about half cut solar cell. The third part shows the information about bifacial solar cell. This part has included a carefully study in order to choose the most correctly and the financially modules and inverters for the systems. The last two part shows the comparative study of the different PV systems. This part has presented the necessary number of modules and inverters, the total necessary area and the economic analysis for each system. The simulation of the solar cell was done by the software MATLAB/SIMULINK. After the analysis of the results of the different solar cell, it was possible to see which cell technology will be preferable for this system.*

Keywords: Comparison between two solar cell i.e. half cut solar cell and bifacial solar cell with standard solar cell

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