

**DESIGN A GRID CONNECTED PHOTOVOLTAIC SYSTEM BY
USING MICROSOFT EXCEL – VISUAL BASIC INTERFACING**

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ABSTRACT

This thesis presents the design of a Grid Connected Photovoltaic System (GCPS) by using Microsoft Excel-Visual Basic interfacing. The Microsoft Excel is used as calculation engine where the visual basic is used as Graphic User Interface (GUI).The GCPS sizing of photovoltaic (PV) with is used to optimize the usage of inverter and PV modules. Designing involves determination number of modules required to meet the required amount of power and selection of type inverter. Configuration of array which is series and parallel combination can be determined. Therefore the power from the PV array can be used to determine suitable inverter. A GCPS design can be used to minimize the computation time compare to normal calculation method. The result shows the simulation for module Alpha 165 and inverter Solarmax 6000C.

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