

**FACULTY OF ELECTRICAL ENGINEERING**

**UNIVERSITI TEKNOLOGI MARA**

**PULAU PINANG**

**FINAL REPORT:**

**SOLAR POWER CHARGER**

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## **ABSTRACT**

The solar panels need to be configured to match the system of DC voltage, which is determined by the battery. System voltages are typical, 12 V DC and 24V DC. The limitation of this project has used a solar power, a battery charger, battery 12V, inverter circuit and AC socket. The single line diagram of the solar power charger will be designed by using Proteus software. This circuit has two designed which is battery charger circuit and inverter circuit using Proteus Software. The load of the output solar is DC and AC. The measurement of this project will be focused on the voltage, current, and power of each of part of the load. Stand-alone solar is a one system that design to generate and produce an electricity by using photovoltaic (PV) solar that is not connected to the grid system. This stand-alone solar panel is a portable power source which converts sun used into a usable electrical energy.

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