

DC ENERGY METER

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ABSTRACT

DC ENERGY METER

This development of Direct Current (DC) energy meter as measurement device that measure amount of energy supplied by DC source. The objective of this study is to design and develop DC energy meter that operate by using microcontroller PIC16F873A. This development also involved study on the DC energy meter circuit and layout and understand the components functions. Development of this DC energy meter involved software programming and hardware design method. By using the software programming method, the energy have been calculated from input voltage and current that produced by DC source. In order to measure the energy, the circuit diagram has been design consists of microcontroller PIC16F873A and LCD display that used to display the output. Successful of this development will lead to a measurement device that can be used in Green Energy Research Centre to measure the energy produce or supplied by solar panel and that been stored in the battery.