# TEMPERATURES PROFILES OF PV MODULE AT GREEN ENERGY RESEARCH CENTRE

Thesis presented in partial fulfilment for the award of the Bachelor of Electrical Engineering (Hons.)

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### ABSTRACT

Temperature of PV module has known to be one of the parameter than varies the performance of photovoltaic. The output current and voltage of photovoltaic module are correlated with the module's temperature. This research is specialized to examine the temperatures profiles of PV module for open circuit and close circuit condition with and without air ventilations at the bottom of the PV modules of standalone mounting structures. The thermocouples are placed at the back of the PV module at eight different locations. Temperatures are taken for every five minutes for one week for four difference conditions at the same eight thermocouples location. Besides that, the temperatures of metal deck mounting structure PV modules are taken at close circuit condition and to be compared with stand-alone PV modules temperatures. The results recorded are analysed based on the variables. The data taken represent by the graph of temperatures versus irradiance in shape of polynomial regression line order 2.

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