World Academy of Science, Engineering and Technology
International Journal of Energy and Environmental Engineering
Vol:10, No:05, 2016

# Experimental Study of Sahara Climat Effect in Photovoltaic Solar Module

**Authors :** A. Benatiallah, A. Hadjadj, D. Benatiallah, F. Abaidi, A. Harrouz

**Abstract :** Photovoltaic system is established as a reliable and economical source of electricity in rural and Sahara areas, especially in developing countries where the population is dispersed, has low consumption of energy and the grid power is not extended to these areas due to viability and financial problems. The production of energy by the photovoltaic system is very fluctuates and depend of meteorological conditions. Wind is a very important and often neglected parameter in the behavior of the solar module. The electric performances of a solar module to the silicon are very appreciable to the blows; in the present work we have studies the behavior of multi-crystal solar module according to the density of dust, and the principals electric feature of the solar module. An evaluation permits to affirm that a solar module under the effect of sand will collect a lower flux to the normal conditions.

**Keywords :** photovoltaic, multi-crystal module, experimental, effect of dust, performances
**Conference Title :** ICSREE 2016 : International Conference on Sustainable and Renewable Energy Engineering
**Conference Location :** Montreal, Canada
**Conference Dates :** May 16-17, 2016

Open Science Index, Energy and Environmental Engineering Vol:10, No:05, 2016 publications.waset.org/abstracts/46063/pdf