

Analysis of Hot-Spots Effects on the Performances of a Photovoltaic System Used in Romania

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Abstract— This article presents an analysis of hot-spots effects on the performances of a photovoltaic system in use. IV and P-V characteristics are analyzed considering different cases of degradation for the photovoltaic module (few hot-spots, large number of hot-spots and highly damaged module). Simulations and experimental data are presented and analyzed considering the energetical performances.

Keywords— photovoltaic module; hot-spot; failure; degradation

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