## Energy storage based on maximum power pointtracking in photovoltaic systems: A comparisonbetween GAs and PSO approaches

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**Abstract:** In this paper, a comparison between GAs and PSO Approaches is considered to select andgenerate an optimal duty cycle which varies with photovoltaic parameter in order toextract the maximum Power from Photovoltaic System using real values of temperatureand insolation. The energy storage has very important role in renewable energy. To illustrate energy storage, we have used a battery type lead-acid simulated in Matlab/Simulink. The obtained simulations results show the effectiveness and the robustness of the proposed approaches.

Keywords : Photovoltaic systems, Chopper, MPPT, PSO, GAs, Energy storage