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Optimal Implementation of Photovoltaic Water Pumping System

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Abstract : To improve the efficiency of photovoltaic pumping system, more attention has been paid to their setting up. This paper presents an optimal technique to establish an efficient system under different conditions of irradiance and temperature. The state of place should be carefully studied before stage of installation of the over system: local climate, boreholes, soil, crops and water resources. The studied system consists of a PV panel, a DC-DC boost converter, a DC motor-pump, and storage tank. The concepts shown in this paper presents a support for an optimal installation of each solar pump.

Keywords : photovoltaic pumping system, optimal implementation, boost converter, motor-pump
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