

Electric Vehicle Charging Station with Battery Storage using Renewable Energy

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Abstract: *Now a days, electric vehicles (EVs) have attracted much attention owing to their use of clean energy. Large progress in lithium-ion battery has propelled the development of EVs. However, the challenge is that growing number of EVs leads to huge demand in electric power, which will aggravate the power grid load. This leads to an exploration for alternative and clean sources of energy to charge EVs. This project implements solar energy system to erect a charging station for EV application. The charging station employs multi-port charging by providing a constant voltage DC bus. The charging controllers are operated based on the concept of power balance, and constant current/constant voltage charging. Performance of the charging system is validated with simulation and experimental result document gives formatting instructions for authors preparing papers for publication in the International Journal*

Keywords: Battery Storage System, Solar PV System, Electric Vehicle Charging Station, Electric Vehicle Battery

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