IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 1, September 2023

Design and Implementation of Wireless Electric Vehicle Charging Stations and Basic Coil Design for Power Transfer

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Abstract: *Several factors contribute to the rising popularity of electric vehicles (EVs). This is advantageous for battling climate change and lowering air pollution. Additionally, compared to conventional petrol vehicles, electric vehicles are far more energy efficient, which may help drivers save money over time on fuel expenses. The rise in the number of electric vehicles now on the road, charging station is an essential component of infrastructure. Long-distance travel is now more practical and accessible, which enables EV owners to recharge their batteries swiftly and effectively in their cars. This paper gives a brief review about different types of electric vehicle charging stations, levels and different coil designs for wireless power transfer and also prototype of wireless EV charging to show the effectiveness of the proposed system. Simulation result of the same is obtained*

Keywords: Electric Vehicles

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